

STIC Search Report

STIC Database Tracking Number: 195419

TO: Shailendra Kumar Location: REM/5C03/5C18

Art Unit: 1621 July 21, 2006

Case Serial Number: 10/817640

From: Usha Shrestha Location: EIC 1700 **REMSEN 4B28**

Phone: 571/272-3519

usha.shrestha@uspto.gov

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ACCESS DB # PLEASE PRINT CLEARLY

Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: 5. Kumar	Examiner #: 10/817 640 Date: 7/12/06
Art Unit: \6A\ Phone Number: 2- 06\40	Serial Number: 10 817640
Location (Bldg/Room#): 503 (Mailbox #): 5018 ************************************	Results Format Preferred (circle): PAPER DISK
**************************************	· ፋፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ ፋ
To ensure an efficient and quality search, please attach a copy of the c	
Title of Invention: Mounched Primar	1 Alcohal compositions and derivative
Inventors (please provide full names):	ee Edwards d'of
Earliest Priority Date: 12/21/00	
Search Topic: Please provide a detailed statement of the search topic, and describe as selected species or structures, keywords, synonyms, acronyms, and registred Define any terms that may have a special meaning. Give examples or re	y numbers, and combine with the concept or utility of the invention.
For Sequence Searches Only Please include all pertinent information appropriate serial number.	·
-A process to produce	branched alkyl ether fulfate composition
Computery; a) contacting an olefin composition	n having an average carbon number in the
range of 3 to 18 having the formula	
$CH_3 \leftarrow CH_{-}^{R_1}$ $CH=R_{2'}$	

where R₁ represents hydrogen or a hydrocarbyl group having from 1 to 3 carbon atoms, $R_{2^{\prime}}$ represents a hydrocarbyl group having from 1 to 7 carbon atoms where the linkage with the CH group is by double bond, and x is a number ranging from 0 to 16, with 1,3propane diol in the presence of a catalyst effective to react the olefin with the diol under conditions effective to produce the branched alcohol composition; and

contacting the branched alcohol composition with a sulfating agent under conditions b) effective to produce a branched alkyl ether sulfate composition.

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=> fil req
FILE 'REGISTRY' ENTERED AT 13:36:34 ON 21 JUL 2006
=> d his ful
     FILE 'HCAPLUS' ENTERED AT 11:35:09 ON 21 JUL 2006
L1
              1 SEA ABB=ON US20040198628/PN
                SEL RN
     FILE 'REGISTRY' ENTERED AT 11:35:43 ON 21 JUL 2006
             14 SEA ABB=ON (112-41-4/BI OR 1120-36-1/BI OR 23377-40-4/
L2
                BI OR 439293-82-0/BI OR 439293-83-1/BI OR 439293-84-2/B
                I OR 439293-85-3/BI OR 439293-86-4/BI OR 439293-87-5/BI
                OR 504-63-2/BI OR 629-73-2/BI OR 7790-94-5/BI OR
                81749-13-5/BI OR 84337-56-4/BI)
L3
                STR
     FILE 'CASREACT' ENTERED AT 11:43:15 ON 21 JUL 2006
L4
                STR L3
L5
              1 SEA SSS SAM L4 ( 95 REACTIONS)
     FILE 'REGISTRY' ENTERED AT 11:46:56 ON 21 JUL 2006
L6
               STR
L7
             50 SEA SSS SAM L6
L8
                SCR 2043
             50 SEA SSS SAM L6 NOT L8
L9
               STR L6
L10
            20 SEA SSS SAM L10 NOT L8
L11
              SCR 1838 OR 1992
L12
L13
            21 SEA SSS SAM L10 NOT (L8 OR L12)
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               STR L10
T.14
              1 SEA SSS SAM L14 (
L15
                                   14 REACTIONS)
               STR L14
L16
              1 SEA SSS SAM L16 (
L17
                                    14 REACTIONS)
   FILE 'REGISTRY' ENTERED AT 12:43:03 ON 21 JUL 2006
              STR L16
L18
               STR L16
L19
               STR L19
L20
L21
            31 SEA SSS SAM L20 NOT (L8 OR L12)
           590 SEA SSS FUL L20 NOT (L8 OR L12)
L22
             3 SEA ABB=ON L2 AND L22
L23
                SAV L22 KUM640/A
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L24
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              0 SEA SSS SAM L24 (
L25
                                     0 REACTIONS)
              5 SEA SSS FUL L24 (
                                    9 REACTIONS)
L26
    FILE 'HCAPLUS' ENTERED AT 13:03:37 ON 21 JUL 2006
           704 SEA ABB=ON L22
L27
           269 SEA ABB=ON L27 AND DETERG?/SC,SX
L28
            35 SEA ABB=ON L27(L) PREP/RL
L29
           214 SEA ABB=ON L28 AND SURFACT?
111 SEA ABB=ON L30 AND (PROCESS? OR METHOD? OR SYNTHES?
L30
              OR PRODUC? OR PREP?)
            4 SEA ABB=ON L31 AND DIOL?
L32
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FILE 'REGISTRY' ENTERED AT 13:10:44 ON 21 JUL 2006
L33
           1 SEA ABB=ON 504-63-2/RN
     FILE 'HCAPLUS' ENTERED AT 13:11:18 ON 21 JUL 2006
L34
          5239 SEA ABB=ON L33
            1 SEA ABB=ON L27 AND L34
L35
             1 SEA ABB=ON L23
L36
            38 SEA ABB=ON L29 OR L32 OR (L35 OR L36)
L37
            23 SEA ABB=ON L31 AND SOLUB?
L38
           55 SEA ABB=ON L37 OR L38
L39
           50 SEA ABB=ON L39 AND (1840-2000)/PRY,AY,PY
L40
=> d que 126
               STR
L24
PRO
                             Ak~^0
                             @6 @7
HO3SO \sim Ak \sim O \sim G1 \sim Ak
   1 2 3 4 5
REP G1=(0-5) 6-3 7-5
NODE ATTRIBUTES:
CONNECT IS E2 RC AT
CONNECT IS E1 RC AT
CONNECT IS E2 RC AT
DEFAULT MLEVEL IS ATOM
       IS SAT AT
GGCAT
                    2
       IS SAT AT
GGCAT
                    5
       IS SAT AT
GGCAT.
                    6
DEFAULT ECLEVEL IS LIMITED
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7
STEREO ATTRIBUTES: NONE
         5 SEA FILE=CASREACT SSS FUL L24 (
                                                 9 REACTIONS)
L26
=> fil casreact
FILE 'CASREACT' ENTERED AT 13:37:08 ON 21 JUL 2006
=> d 126 1-5 ibib abs fhit
L26 ANSWER 1 OF 5 CASREACT COPYRIGHT 2006 ACS on STN
                       141:395586 CASREACT
ACCESSION NUMBER:
                        Method for the production of ionic liquids
TITLE:
                        containing alkyl sulphate and functionalized
                        alkyl sulphate-anions
INVENTOR(S):
                        Wasserscheid, Peter; Van Hal, Roy; Hilgers,
                        Claus
PATENT ASSIGNEE(S):
                        Solvent Innovation G.m.b.H., Germany
                        PCT Int. Appl., 22 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        German
FAMILY ACC. NUM. COUNT:
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PATENT INFORMATION:

```
APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
     ______
                     ----
                                         -----
                     A1 20041111
                                         WO 2004-EP50619 20040427
    WO 2004096776
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
            CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES,
            FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
            MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT,
            RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
            ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
            CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
            MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,
            CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                    DE 2003-10319465 20030429
EP 2004-741484 20040427
    DE 10319465
                    A1 20041118
    EP 1622877
                     A1
                         20060208
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
            MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                    A1 20060323
                                         US 2005-261941 20051028
    US 2006063945
PRIORITY APPLN. INFO.:
                                         DE 2003-10319465 20030429
                                         WO 2004-EP50619 20040427
```

OTHER SOURCE(S):

III

MARPAT 141:395586

GI

The invention relates to a method for the production of ionic liqs. of AB general formula [cation] [R'0-S03]-, [cation = +NR1R2R2R, +PR1R2R3R, I, II, III, IV; R' = R4 $\{X(CH2)n\}m$; n = 1 - 400; X = 0, S, Se, bond, OSiMe2O, OSiEt2O, OSi(OMe)2O, OSi(OEt)2O, PPh, PR''; R4 = (un)branched, (un)saturated C1-36-aliphatic, alicyclic (optionally substituted with OH, OR'', CO2H, CO2R'', NH2, SO4, F, Cl, Br, I, CN); R'' = (un)branched C1-12-alkyl; R1, R2, R3 = H, (un)branched, (un) saturated C1-20-aliphatic, alicyclic, heteroaryl,

C3-8-heteroaryl-(C1-6-alkyl); R = C1-20-aliphatic, alicyclic, heteroaryl, C3-8-heteroaryl-(C1-6-alkyl), C5-12-aryl-(C1-6-alkyl)]. The method is characterized by alkylation of pyridine, imidazole, phosphane, amine, pyrazole or diazole derivs. with Me2SO4 or Et2SO4, followed by reaction with an alc. (R'OH). Thus, 1-ethyl-3-methylimidazolium 2-(2-methoxyethoxy)ethyl sulfate was prepared in quant. yield from 1-ethylimidazole via alkylation with Me2SO4 followed by transesterification with MeOCH2CH2OCH2CH2OH.

RX(1) OF 4 A + B + C ===> D

D: CM 1 D: CM 2 YIELD 100% YIELD 100%

RX(1) RCT A 7098-07-9

STAGE(1)

CON room temperature

STAGE(2)

RCT B 77-78-1

CON overnight, room temperature

STAGE(3)

RCT C 111-77-3

CON 5 hours, 160 deg C

PRO D 790663-77-3

NTE first stages Schlenk flask; last stage alc. distd. off
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L26 ANSWER 2 OF 5 CASREACT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

140:357341 CASREACT

TITLE:

Procedures for the production of new,

functionalized ionic liquids

INVENTOR(S):

Wasserscheid, Peter; Driessen-Hoelscher, Birgit; Steffens, Christian; Hilgers, Claus

PATENT ASSIGNEE(S):

Solvent Innovation G.m.b.H., Germany

SOURCE:

Ger. Offen., 15 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE KIND DATE

DE 10247578 A1 20040422 DE 2002-10247578 20021013 WO 2004035542 20040429 WO 2003-EP11306 20031013 A1

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES,

FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO,

RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ,

UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL,

PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

A1 20040504 AU 2003278072

AU 2003-278072 20031013 PRIORITY APPLN. INFO.: DE 2002-10247578 20021013

WO 2003-EP11306 20031013

OTHER SOURCE(S):

MARPAT 140:357341

GT

AB This invention refers to new ionic liqs., [R1R2C(A)CH(Y)R3]+X- [I; A = NR4R5R6, R3CH(Y)CR1R2NR4R5, PR4R5R6, R3CH(Y)CR1R2PR4R5, A1, A2, A3, A4; X = PF6 - BF4 - CF3CO2 - CF3SO3 - (CF3SO2) 2N - A2, A3, A4; X = PF6 - BF4 - CF3CO2 - CF3SO3 - CF3SO3 - CF3SO2) 2N - A2, A3, A4; X = PF6 - BF4 - CF3CO2 - CF3SO3 - CF3SO3(CF3SO2) (CF3CO) N-, R7SO3, R7OSO3-, R7CO2-, Cl-, Br-, I-, NO3-, CN-, HSO4-, R7R8PO4-; R1 - R7 = H, (un) branched, (un) saturated C1-20-alkyl, C1-20-cycloalkyl, heteroaryl, heteroaryl-(C1-6-alkyl) (3-8 carbons in heterocycle also containing O, N and/or S); aryl,

aryl(C1-6-alkyl) (with 5 -12 carbons in the aryl residue); Y = COR9, CO2R9, OC(:0)R9, OR9, CONH2, CN, CONHR9, CONR9R10, NHR9, NR9R10; R9, R10 = H, (un)branched, (un)saturated C1-20-alkyl, C1-20-cycloalkyl, heteroaryl-(C1-6-alkyl) (3-8 carbons in heterocycle also containing O, N and/or S), aryl, aryl(C1-6-alkyl) (with 5 -12 carbons in the aryl residue), etc.], with functionalized N-alkyl and P-alkyl groups as well as to a new procedure for its production in a very efficient and economical way. The invention also refers to the preparation of I via reaction of acrylic compds., R1R2C:C(Y)R3, with amines, phosphanes, imidazoles, pyrazoles or pyridines in the presence of an acid. Thus, 1-(2-cyanoethyl)-3-butylimidazolium tetrafluorborate was prepared from 1-butylimidazolium tetrafluorborate via reaction with acrylonitrile in the presence of pyridine and hydroquinone. These new ionic liqs. can e.g. as solvents and/or solvent addns. in chemical reactions, when extractant or as heat distribution media are used.

RX(2) OF 4 F + G + B ===> H

MeO
$$\stackrel{O}{\longrightarrow}$$
 H $\stackrel{O}{\longrightarrow}$ N $\stackrel{O}{\longrightarrow}$ S $\stackrel{O}{\longrightarrow}$ O $\stackrel{}{\longrightarrow}$ C $\stackrel{}{\Longrightarrow}$ N $\stackrel{O}{\longrightarrow}$ D $\stackrel{O}{\longrightarrow}$ C $\stackrel{}{\Longrightarrow}$ N $\stackrel{O}{\longrightarrow}$ C $\stackrel{}{\Longrightarrow}$ N $\stackrel{O}{\longrightarrow}$ C $\stackrel{}{\Longrightarrow}$ N $\stackrel{O}{\longrightarrow}$ C $\stackrel{}{\Longrightarrow}$ N $\stackrel{O}{\longrightarrow}$ D $\stackrel{O}{\longrightarrow}$ C $\stackrel{}{\Longrightarrow}$ N $\stackrel{O}{\longrightarrow}$ C $\stackrel{O}{\longrightarrow}$ N $\stackrel{O}{\longrightarrow}$

RX(2) RCT F 109-86-4, G 26412-87-3

STAGE(1)

CON 3 hours, room temperature

STAGE(2)

RCT B 107-13-1

CON SUBSTAGE(1) 18 hours, 70 deg C SUBSTAGE(2) 2 hours, 50 deg C

PRO H 681164-11-4

L26 ANSWER 3 OF 5 CASREACT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

140:16684 CASREACT

TITLE:

New, functionalized ionic liquids from Michael-type reactions - a chance for combinatorial ionic liquid development

AUTHOR(S): Wasserscheid, Peter; Driessen-Hoelscher,

USHA SHRESTHA EIC 1700 REM 4B28

Birgit; van Hal, Roy; Steffens, H. Christian;

Zimmermann, Joerg

CORPORATE SOURCE: Institut fuer Technische Chemie und

Makromolekulare Chemie, RWTH Aachen, Aachen,

52074, Germany

Chemical Communications (Cambridge, United SOURCE:

> Kingdom) (2003), (16), 2038-2039 CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE:

Journal LANGUAGE: English

The authors describe for the first time an alternative and far more efficient method to synthesize functionalized ionic liqs. in a simple, straightforward, two-step synthesis. E.g, addition of N-methylimidazole to p-toluenesulfonic acid monohydrate, followed by addition of Me vinyl ketone, gave the ionic liquid 1-methyl-3-(3-oxobutyl)imidazolium 4-toluenesulfonate.

RX(4) OF 8 В С

MeO
$$^{\circ}$$
 H $^{\circ}$ N $^{\circ}$ CH₂ $^{\circ}$ B $^{\circ}$ C

M: CM 2 YIELD 99%

RX (4) RCT L 109-86-4

STAGE (1)

RGT N 26412-87-3 Pyridine-S03 (1:1)

2 hours, 80 deg C

STAGE (2)

RCT B 616-47-7

room temperature

STAGE (3)

RCT C 78-94-4

CON overnight, room temperature

PRO M 630393-18-9

NTE combinatorial, product is ionic liq., no solvent

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L26 ANSWER 4 OF 5 CASREACT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

133:207590 CASREACT

TITLE:

Preparation of sulfuric acid esters for

anionic surfactants

INVENTOR (S):

Yamamoto, Goro

PATENT ASSIGNEE(S): SOURCE:

Asahi Denka Kogyo K. K., Japan Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000247947	A2	20000912	JP 1999-52276	19990301
PRIORITY APPLN. INFO.	:		JP 1999-52276	19990301

AB Title compds. are prepared by reaction of hydroxy compds. with 0.5-1.5 mol H2SO4 per 1 mol OH group as 10-99 weight% aqueous solution Triethylene glycol lauryl ether (1 mol) was reacted with 1.1 mol H2SO4 (50% aqueous solution) at 20-30° under 5-50 mmHg for 4 h to give triethylene glycol lauryl ether sulfate at 96% conversion., which was treated with NaOH to give Na salt with Gardner color number 1.

RX(1) OF 3 A ===> B

$$H^{+}$$

O

O

(CH₂)₁₁

Me

(1)

Na

В

RX(1) RCT A 3055-94-5

STAGE(1)

RGT C 7664-93-9 H2SO4 SOL 7732-18-5 Water

STAGE(2)

RGT D 1310-73-2 NaOH

PRO B 13150-00-0

NTE 20-30° and 5-10 mmHg

L26 ANSWER 5 OF 5 CASREACT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

111:41842 CASREACT

TITLE:

Sulfated hydroxyalkyl ethers of alkoxylated

INVENTOR(S):

alcohols and their preparation and use Schenker, Gilbert; Piorr, Robert; Luettge,

Sabine

PATENT ASSIGNEE(S):

Henkel K.-G.a.A., Fed. Rep. Ger.

SOURCE:

Eur. Pat. Appl., 22 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P.	ATENT	NO.		KIN	1D	DATE	2		AP	PLIC	CATIO	и ис	o.	DP	TE	
			- -													
EI	2993	70		A2	2	1989	0118		EP	198	8-1	1090	4	19	880	708
EI	2993	70		A3	3	1990	0516									
EI	2993	70		B1	L	1994	0831									
•	R:	ΑT,	BE, 0	CH,	DE,	ES,	FR,	GB,	GR,	IT,	LI,	NL,	SE			
DI	3723	354		A1	L	1989	0126		DE	198	37-3	7233	54	19	870	715
US	3 4931	218		Α		1990	0605		US	198	8-23	1871	.9	19	880	713
JI	0103	8056		A2	?	1989	0208		JP	198	8-1	7796	3	19	880	715
PRIORIT	TY APP	LN.]	INFO.	:					DE	198	7-3	7233	54	19	870	715
OTHER S	OURCE	(S):			MAR	PAT	111:4	11842	!							
	,									_						_

Compds. R1CH(OSO3M)CHR3(OCHR4CH2)nOR2 (R1 = linear C1-16 alkyl; R2 AB = linear or branched C1-22 alkyl; R3 = H, linear C1-16 alkyl; R4 = H, Me; M = H, alkali metal, ammonium, etc.) are prepared by sulfating compds. R1CH(OH)CHR3(OCHR4CH2)nOR2 which are prepared from epoxyalkanes and alkoxylated H(OCHR4CH2)nOR2. The compds. are biodegradable and useful as low-foaming wetting agents and detergent components. A reaction product of 1 mol 1,2-epoxyoctane and 1 mol 10:1 (mol) ethylene oxide-BuOH adduct was sulfated to prepare a surfactant.

...D ===> **E** RX(2) OF 3

```
n-BuO (CH<sub>2</sub>) 5 Me
```

Na

E

```
RX(2) RCT D 120928-99-6
PRO E 131707-97-6
```

```
=> d que 140
```

L2

14 SEA FILE=REGISTRY ABB=ON (112-41-4/BI OR 1120-36-1/BI OR 23377-40-4/BI OR 439293-82-0/BI OR 439293-83-1/BI OR 439293-84-2/BI OR 439293-85-3/BI OR 439293-86-4/BI OR 439293-87-5/BI OR 504-63-2/BI OR 629-73-2/BI OR 7790-94-5/BI OR 81749-13-5/BI OR 84337-56-4/BI)

L8 SCR 2043

L12 SCR 1838 OR 1992

L20 STR

REP G1=(0-5) 6-3 7-5

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 2

CONNECT IS E1 RC AT 5

CONNECT IS E2 RC AT 6

DEFAULT MLEVEL IS ATOM GGCAT IS SAT AT 2

GGCAT IS SAT AT 5

GGCAT IS SAT AT 6

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

ь22	590) SEA	FILE=REGISTR:	Y SSS FUI	L L2(LOM (r. (T8 OK 1	u12)	
L23	3	SEA	FILE=REGISTRY	Y ABB=ON	L2	AND	L22		
L27	704	SEA	FILE=HCAPLUS	ABB=ON	L22				
L28	269	SEA	FILE=HCAPLUS	ABB=ON	L27	AND	DETERG?/S	SC,S	X
L29	35	SEA	FILE=HCAPLUS	ABB=ON	L27	(L) PF	REP/RL		
L30	214	SEA	FILE=HCAPLUS	ABB=ON	L28	AND	SURFACT?		
L31	113	SEA	FILE=HCAPLUS	ABB=ON	L30	AND	(PROCESS	? OR	METHOD?
		OR S	YNTHES? OR PI	RODUC? OF	R PRE	EP?)			
L32	4	SEA	FILE=HCAPLUS	ABB=ON	L31	AND	DIOL?		
L33	3	SEA	FILE=REGISTRY	ABB=ON	504	l-63-	-2/RN		
L34	5239	SEA	FILE=HCAPLUS	ABB=ON	L33				
L35	3	SEA	FILE=HCAPLUS	ABB=ON	L27	AND	L34		

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 13:37:42 ON 21 JUL 2006

=> d 140 1-50 ibib abs hitstr hitind

L40 ANSWER 1 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:606540 HCAPLUS

DOCUMENT NUMBER: 137:159000

TITLE: Cleaning compositions containing anionic

surfactants

INVENTOR(S): Fukamachi, Takeshi; Nagai, Kunio

PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

Patent

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	ATENT NO.	KIND	DATE	APPLICATION NO.	DATE
J	P 2002226889	A2	20020814	JP 2001-365474	
		•			2001 1130
				<	
PRIORI	TY APPLN. INFO.:			JP 2000-365085 A	
					2000 1130

AB Cleaning compns. contain ≥2 different types of anionic surfactants selected from sulfate ester salts of aliphatic alc.-alkylene oxide adducts having specific compns. and mol. wts., sulfosuccinic acid ester salts, ether carboxylic acid salts, and phosphoric acid ester salts. Thus, a shampoo contained diethylene glycol lauryl ether sulfate Na salt 7, diethylene glycol lauryl ether monomaleate sulfonate salt 3, polyethylene glycol lauryl ether sulfosuccinate di-Na salt 5, a coco fatty acid diethanolamide 3, polyethylene glycol dioleate methylglucoside 2, glycerin 3, cationic cellulose 1, EDTA Na salt 0.05, and water to 100 parts.

IT 3088-31-1P

(cleaning compns. for shampoo containing anionic surfactants)

RN 3088-31-1 HCAPLUS

 $Me^{-(CH_2)}_{11}-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-OSO_3H$

Na

IC ICM C11D001-29 ICS A61K007-075; A61K007-50; C11D001-06; C11D001-28; C11D001-34; C11D001-72; C11D003-20; C11D003-37; C11D003-40; C11D003-48; C11D003-50 62-3 (Essential Oils and Cosmetics) CC Section cross-reference(s): 46 · ST anionic surfactant cleaning compn shampoo IΤ Glycosides (Me; cleaning compns. for shampoo containing anionic surfactants) IT Alcohols, preparation (alkoxylated, sulfates; cleaning compns. for shampoo containing anionic surfactants) Polyoxyalkylenes, preparation (alkyl group-terminated, sulfates; cleaning compns. for shampoo containing anionic surfactants) IT Surfactants (amphoteric; cleaning compns. for shampoo containing anionic surfactants) IT Surfactants (anionic; cleaning compns. for shampoo containing anionic surfactants) IT Surfactants (cationic; cleaning compns. for shampoo containing anionic surfactants) IT Shampoos Sulfonation (cleaning compns. for shampoo containing anionic surfactants) IT Amides, uses (coco; cleaning compns. for shampoo containing anionic surfactants) IT Amides, uses (fatty; cleaning compns. for shampoo containing anionic surfactants) IT Polyoxyalkylenes, preparation (mono(alkyl group)-terminated, sulfates; cleaning compns. for shampoo containing anionic surfactants) IT Surfactants (nonionic; cleaning compns. for shampoo containing anionic surfactants) IT 10034-81-8, Magnesium perchlorate (cleaning compns. for shampoo containing anionic surfactants) IT 3055-93-4P, Diethylene glycol lauryl ether

(cleaning compns. for shampoo containing anionic

(cleaning compns. for shampoo containing anionic

75-21-8, Ethylene oxide, reactions 75-56-9, Propylene oxide,

surfactants)

surfactants)

3088-31-1P

37311-00-5P

IT

IT

9002-92-0P, Polyethylene glycol lauryl ether

38975-04-1P 68935-84-2P 78325-68-5DP, salts

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reactions 112-53-8, Lauryl alcohol 3926-62-3, Sodium monochloroacetate 7664-38-2, Phosphoric acid, reactions 7757-83-7, Sodium sulfite 7790-94-5, Chlorosulfonic acid (cleaning compns. for shampoo containing anionic surfactants)
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IT 107-68-6D, Methyltaurine, derivs. 111-42-2D, Diethanolamine, fatty amides 141-43-5D, Monoethanolamine, fatty amides 683-10-3, Lauryldimethylaminoacetic acid betaine 7003-12-5 36574-66-0D, fatty amides 59149-04-1D, N-Carboxymethyl-N-hydroxyethylimidazolinium betaine, alkyl derivative 79591-34-7 97372-61-7 104365-77-7 145429-49-8

(cleaning compns. for shampoo containing anionic
surfactants)

L40 ANSWER 2 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:487507 HCAPLUS

DOCUMENT NUMBER:

137:64930

TITLE:

Branched primary alcohol compositions and

derivatives, their preparation for

detergents

INVENTOR (S):

Edwards, Charles Lee; Raney, Kirk Herbert;

Shpakoff, Paul Gregory

PATENT ASSIGNEE(S):

Shell Internationale Research Maatschappij BV,

Neth.

SOURCE:

PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	rent :	NO.			KIN	D	DATE		-	APPL	ICAT	ION	NO.		DI	ATE
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WO	2002	0500	06		A2		2002	0627	1	WO 2	001-	EP15	143			
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WO	2002															
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							NZ,									
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		•	•	ZM,												
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	ΑT,	
		BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	
		ΝL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	
		ML,	MR,	ΝE,	SN,	TD,	TG									
US	2002	1517	38		A1		2002	1017	τ	US 2	001-	2508	0			
															20	01
															12	19
										<						
US	6706	931			B2		2004	0316								
CA	24324	425			AA		2002	0627	(CA 2	001-	2432	425			
															20	01
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										<						
ΑU	2002	0345	97		A5		2002	0701	7	AU 20	002-	3459	7			

USHA SHRESTHA EIC 1700 REM 4B28

				2001 1220
			<	
EP 1343861	A2	20030917	EP 2001-985430	222
				2001 1220
			<	1220
R: AT. BE. CH	DE.	DK. ES. FR.	GB, GR, IT, LI, LU,	NL. SE.
			RO, MK, CY, AL, TR	,,
BR 2001016456			BR 2001-16456	
				2001
				1220
			<	
JP 2004520311	T2	20040708	JP 2002-551508	2001
				2001 1220
			<	1220
NZ 526377	A	20041224		
3.2 324377				2001
				1220
			<	
ZA 2003004708	Α	20040505	ZA 2003-4708	
				2003
			·	0618
VIC 000406F06F		00040400	<	
US 2004067867	A1	20040408	US 2003-678889	2003
				1003
			<	1003
US 2004068133	A1	20040408		
			00 2000 0.72.1	2003
			-	1003
			<	
US 6909020		20050621		
US 2004073055	A1	20040415	US 2003-679126	
				2003
			<	1003
US 6891056	В2	20050510		
US 2004077894	A1			
				2003
				1003
			<	
US 7071364	B2			
US 2004198628	A1	20041007	US 2004-817640	
				2004
			_	0402
PRIORITY APPLN. INFO.:			< US 2000-257670P	P
PRIORITI APPEN. INFO			05 2000-237070F	2000
				1221
			<	_
			US 2001-25080	A3
				2001
				1219
				22
			WO 2001-EP15143	W
				2001
				1220

US 2003-679174

2003 1003

A3

OTHER SOURCE(S): MARPAT 137:64930

AB A branched alc. composition comprising a branched ether primary alc. Me(CHR1)xCHR2O(CH2)3OH where R1 = H or a hydrocarbyl radical having 1-3 C atoms, R2 = hydrocarbyl radical having 1-7 C atoms, x = 0-16, where the total number of C atoms in the alc. is 9-24; and alkyl ether sulfate, alc. alkoxysulfate, and alkanol alkoxylate derivs. are useful in detergent compns. Thus, 0.6 mol of 1-dodecene and 1.8 mol of 1,3-propanediol and 0.024 mol of toluenesulfonic acid monohydrate were heated to 150° for 4 h, and give a 2 phase mixture from which was separated 3-dodecyloxy-1-propanol (I), selectivity to I was 97%, which was reacted with chlorosulfonic acid (0.7 mol) to give an anionic surfactant having critical micelle concentration (25°) 0.062 and surface tension 28 dynes/cm.

IT 439293-82-0P 439293-83-1P 439293-84-2P

(branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance)

RN 439293-82-0 HCAPLUS

CN 1-Propanol, 3-(dodecyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME)

 $HO_3SO-(CH_2)_3-O-(CH_2)_{11}-Me$

RN 439293-83-1 HCAPLUS

CN 1-Propanol, 3-(tetradecyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME)

 $HO_3SO-(CH_2)_3-O-(CH_2)_{13}-Me$

RN 439293-84-2 HCAPLUS

CN 1-Propanol, 3-[3-(hexadecyloxy)propoxy]-, hydrogen sulfate (9CI) (CA INDEX NAME)

 $HO_3SO-(CH_2)_3-O-(CH_2)_3-O-(CH_2)_{15}-Me$

IT 504-63-2, 1,3-Propanediol

(branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance)

RN 504-63-2 HCAPLUS

CN 1,3-Propanediol (8CI, 9CI) (CA INDEX NAME)

 $HO-CH_2-CH_2-CH_2-OH$

IC ICM C07C043-00

CC 46-3 (Surface Active Agents and Detergents)
 Section cross-reference(s): 23

KUMAR 10/817,640 surfactant branched primary alc alkoxylate; sulfate ST branched primary alc ether Surfactants IT (anionic; branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance) IT (branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance) Alkenes, reactions IT (branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance) IT Surfactants (nonionic; branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance) IT Alcohols, preparation (primary, branched; branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance) IT 439293-82-0P 439293-83-1P 439293-84-2P 439293-85-3P 439293-86-4P 439293-87-5P (branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance) IT 23377-40-4P 81749-13-5P 84337-56-4P (branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance) 112-41-4, 1-Dodecene 504-63-2, 1,3-Propanediol 629-73-2, NEODENE 16 1120-36-1, NEODENE 14 (branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance)

7790-94-5, Chlorosulfonic acid IT

(sulfonation of branched primary alc.; branched primary alc. compns. and derivs. for surfactants with good cold water solubility and high Ca tolerance)

L40 ANSWER 3 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:59184 HCAPLUS

DOCUMENT NUMBER: TITLE:

136:264906 Use of octanol/water partition coefficients as

hydrophobicity parameters in

surfactant science Roberts, David W.

AUTHOR (S):

CORPORATE SOURCE:

Unilever Research Port Sunlight, Behbington,

Wirral, CH63 3JW, UK

SOURCE:

World Surfactants Congress, 5th, Firenze,

Italy, May 29-June 2, 2000 (2000),

1542-1550. Comite Europeen des Agents de Surface et leurs Intermediaires Organiques:

Brussels, Belg. CODEN: 69BYUW

DOCUMENT TYPE:

Conference; (computer optical disk)

LANGUAGE: English

The octanol/water partition coefficient P (sometimes referred to as Ko/w) is widely used, usually as its logarithm, in modeling

pharmacol. and toxicol. properties of chems. Since log P values can be calculated from mol. structure, they are very useful in predicting various biol. properties of chems. This paper describes how the log P calcn. method can be extended to surfactants, and how log P and log P fragment values can be used as hydrophobicity parameters in quant. structure-activity relationships for a range of surfactant properties, including aquatic toxicity, critical micelle concentration and solubilizability.

IT 15826-16-1 405196-62-5

(use of octanol/water partition coeffs. as hydrophobicity parameters in surfactant science)

RN 15826-16-1 HCAPLUS

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

Na

RN 405196-62-5 HCAPLUS

CN Ethanol, 2-[2-[(2-ethylundecyl)oxy]ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H$$

|
Et-CH-(CH₂)₈-Me

Na

CC 46-3 (Surface Active Agents and Detergents)
Section cross-reference(s): 65

ST surfactant hydrophobicity parameter calcn method partition coeff

IT Toxicity

(aquatic; use of octanol/water partition coeffs. as hydrophobicity parameters in **surfactant** science)

IT Alcohols, uses

(ethoxylated; use of octanol/water partition coeffs. as hydrophobicity parameters in surfactant science)

IT Critical micelle concentration

Hydrophobicity

Mathematical methods

Partition

QSAR (structure-activity relationship)

Solubility

Surfactants

(use of octanol/water partition coeffs. as hydrophobicity parameters in **surfactant** science)

IT 60-01-5, Tributyrin 71-43-2, Benzene, uses 99-87-6, p-Cymene 100-41-4, Ethylbenzene, uses 103-65-1, n-Propylbenzene 104-51-8, n-Butylbenzene 104-76-7, 2-Ethyl hexanol 106-42-3,

```
p-Xylene, uses 108-10-1, Methyl isobutyl ketone 108-88-3,
     Toluene, uses 110-54-3, n-Hexane, uses 111-65-9, n-Octane,
          111-84-2, n-Nonane 111-86-4, n-Octylamine 111-87-5,
    n-Octanol, uses 112-40-3, n-Dodecane 112-53-8, Lauryl alcohol
     124-18-5, n-Decane 142-82-5, n-Heptane, uses 538-68-1,
    n-Amylbenzene 628-63-7, n-Amyl acetate 629-59-4, n-Tetradecane
     1634-04-4, Methyl tert-butyl ether 17348-59-3
        (solubility of; in use of octanol/water partition coeffs.
       as hydrophobicity parameters in surfactant science)
IT
     29063-28-3, Octanol
        (solubility of; in use of octanol/water partition coeffs.
       as hydrophobicity parameters in surfactant science)
IT
     7732-18-5, Water, properties
        (use of octanol/water partition coeffs. as hydrophobicity
       parameters in surfactant science)
IT
     151-21-3, Sodium dodecylsulfate, uses 2211-98-5, Sodium
     4-dodecylbenzenesulfonate 4016-21-1 4536-30-5 4669-23-2
    15826-16-1 61670-33-5, Sodium 2-methyldodecylsulfate
     81089-97-6
                146794-61-8 405196-62-5
        (use of octanol/water partition coeffs. as hydrophobicity
       parameters in surfactant science)
REFERENCE COUNT:
                              THERE ARE 12 CITED REFERENCES AVAILABLE
                        12
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L40 ANSWER 4 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                       2001:57087 HCAPLUS
DOCUMENT NUMBER:
                        134:117347
TITLE:
                        Lignin removing agents for oxygen bleaching of
                        pulps
                        Oki, Yoshiaki; Suzuki, Takehiro; Kajigaya,
INVENTOR(S):
                        Hiromi
PATENT ASSIGNEE(S):
                        Toho Chemical Industry Co., Ltd., Japan
SOURCE:
                        Jpn. Kokai Tokkyo Koho, 5 pp.
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                    KIND DATE
                                       APPLICATION NO.
                                                                DATE
                       ----
                       A2 20010123
    JP 2001020192
                                         JP 1999-224339
                                                                 1999
                                                                 0705
                                             <--
PRIORITY APPLN. INFO.:
                                          JP 1999-224339
                                                                 1999
                                                                 0705
OTHER SOURCE(S):
                       MARPAT 134:117347
    The lignin removing agents comprise RO(EO)nSO3M and/or
    [RO(EO)n]mPO(OM)q (R = C6-22-linear or branched alkyl, alkenyl,
    alkylphenyl containing C8-12 alkyl, alkylcyclohexyl; EO = oxyethylene;
    n = 0-30; m = 1, 2; m + q = 3, M = H, monovalent metal atom,
    ammonium, alkanolammonium). Thus, pulps (Kappa number 10.7) were
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O-bleached in the presence of a composition containing sodium tridecyltriethoxysulfate to show Kappa number 10.7 and Hunter

whiteness 43.8.

IT 25446-78-0P, Sodium tridecyltriethoxysulfate 38974-99-1P, Sodium decyldiethoxysulfate

(lignin removing surfactants for oxygen bleaching of pulps)

RN 25446-78-0 HCAPLUS

CN Ethanol, 2-[2-[2-(tridecyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{12} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

Na

RN 38974-99-1 HCAPLUS

CN Ethanol, 2-[2-(decyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)} = O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

Na

IC ICM D21C009-147

ICS C11D001-12; C11D001-34

CC 43-6 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 46

IT 9046-01-9P, Phosphoric acid ester with ethoxylated tridecyl alcohol 25446-78-0P, Sodium tridecyltriethoxysulfate 38974-99-1P, Sodium decyldiethoxysulfate 51811-79-1P, Phosphoric acid ester with ethoxylated nonylphenol 320573-52-2P 320574-26-3P 320574-27-4P, Phosphoric acid ester with ethoxylated nonylcyclohexanol 320574-30-9P (lignin removing surfactants for oxygen bleaching of pulps)

L40 ANSWER 5 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:634990 HCAPLUS

DOCUMENT NUMBER:

133:207590

TITLE:

Preparation of sulfuric acid esters for

anionic surfactants

INVENTOR(S):

Yamamoto, Goro

PATENT ASSIGNEE(S): SOURCE:

Asahi Denka Kogyo K. K., Japan Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000247947	A2	20000912	JP 1999-52276	
				1999
				0301

PRIORITY APPLN. INFO.:

JP 1999-52276

1999 0301

OTHER SOURCE(S): CASREACT 133:207590

AB Title compds. are prepared by reaction of hydroxy compds. with 0.5-1.5 mol H2SO4 per 1 mol OH group as 10-99 weight% aqueous solution Triethylene glycol lauryl ether (1 mol) was reacted with 1.1 mol H2SO4 (50% aqueous solution) at 20-30° under 5-50 mmHg for 4 h to give triethylene glycol lauryl ether sulfate at 96% conversion., which was treated with NaOH to give Na salt with Gardner color number 1.

RN 14960-11-3 HCAPLUS

CN Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]ethoxy]-, hydrogen sulfate
 (8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

IT 13150-00-0P, Triethylene glycol lauryl ether sulfate sodium salt

(preparation of sulfuric acid esters for anionic surfactants)

RN 13150-00-0 HCAPLUS

 $\text{Me-} \ (\text{CH}_2)_{11} - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{OSO}_3 \text{H}$

Na

IC ICM C07C303-24

ICS C07C305-06; C07C305-08; C07C305-10; C11D001-14; C11D001-29

CC 23-8 (Aliphatic Compounds)

Section cross-reference(s): 46

IT 151-41-7P, Lauryl sulfate 14960-11-3P, Triethylene glycol lauryl ether sulfate

(preparation of sulfuric acid esters for anionic surfactants)

IT 151-21-3P, Sodium lauryl sulfate, preparation 13150-00-0P, Triethylene glycol lauryl ether sulfate sodium salt (preparation of sulfuric acid esters for anionic surfactants)

L40 ANSWER 6 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:396795 HCAPLUS

DOCUMENT NUMBER:

133:4800

TITLE:

Preparation of quaternary phosphine salts as

disinfectants and surfactants

INVENTOR(S):

Yao, Cheng; Wang, Jintang; Zhu, Hongjun; Pu,

Hongzhong; Chen, Guosong

PATENT ASSIGNEE(S):

Nanjing Chemical Engineering Inst., Peop. Rep.

China

SOURCE:

Faming Zhuanli Shenqing Gongkai Shuomingshu,

12 pp.

CODEN: CNXXEV

DOCUMENT TYPE:

Patent Chinese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1220267	A	19990623	CN 1998-111552	
				1998
				1102
CV 1061051		20212124	<	
CN 1061051 PRIORITY APPLN. INFO.:	В	20010124	CN 1998-111552	
				1998
				1102

< - -

OTHER SOURCE(S): CASREACT 133:4800; MARPAT 133:4800 The modified quaternary phosphonium salts are including ROCH2P(R1)(R2)(R3)X, ROCH2OCH2CH2P(R1)(R2)(R3)X, or RO(CH2CH2)m-1CH2CH2P(R1)(R2)(R3)X(R = C1-22 alkyl, Ph, or C1-18alkylphenyl; R1, and/or R2, and/or R3 = C1-4 alkyl, Ph, or benzyl; X = Cl, Br, or HSO4; and m = 1-50). Compds. ROCH2P(R1)(R2)(R3)Xor ROCH2OCH2CH2P(R1)(R2)(R3)X are prepared by allowing to react ROH with (CH2O)n and MX or HOCH2CH2X in the presence of acid or base at 20-1000' to obtain ROCH2X or ROCH2OCH2CH2X, and allowing to react with P(R1)(R2)(R3) at 60-200° and 0-1 MPa for 4-80 h under bubbling inert gas (N2). Compds.RO(CH2CH2)m-1CH2CH2P(R1)(R2)(R3)X are prepared by allowing to react RO(CH2CH2O)mH with SOCl2 in the presence of organic base at 40-100° for 2-12 h, distilling in vacuum to obtain RO(CH2CH2O)m-1CH2CH2Cl, and allowing to react P(R1)(R2)(R3). modified quaternary phosphonium salt is used as surfactant for sterilizing sulfate reducing bacteria in oil field and industrial water treatment, and as emulsifier, dispersant, antistatic agent, and disinfectant in textile dye, daily chems.

IT 270911-26-7P

(preparation of quaternary phosphine salts as bactericides and surfactants)

RN 270911-26-7 HCAPLUS

 $Me^{-(CH_2)_{13}-O-CH_2-O-CH_2-CH_2-OSO_3H}$

IC ICM C07F009-02

ICS A01N057-04; C09K003-16

CC 29-7 (Organometallic and Organometalloidal Compounds)
 Section cross-reference(s): 23

IT 13497-61-5P 13497-62-6P 13497-63-7P 29677-37-0P 60220-18-0P 60220-20-4P 63772-28-1P 88591-69-9P 253445-12-4P 253445-17-9P 270911-07-4P 270911-08-5P 270911-23-4P 270911-24-5P **270911-26-7P** 270911-45-0P (preparation of quaternary phosphine salts as bactericides and surfactants)

L40 ANSWER 7 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2000:342677 HCAPLUS

DOCUMENT NUMBER:

132:323051

TITLE:

Sprays producing artificial snow

flakes

INVENTOR(S):

Cui, Yuefei

PATENT ASSIGNEE(S): SOURCE:

Peop. Rep. China Faming Zhuanli Shenqing Gongkai Shuomingshu, 7

CODEN: CNXXEV

DOCUMENT TYPE:

Patent

LANGUAGE:

Chinese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1213685	A	19990414	CN 1998-113326	
				1998
•				0827
			<	
PRIORITY APPLN. INFO.:			CN 1998-113326	
				1998
				0827

Spray ligs. contain foaming surfactants 1.0-30.0, foam stabilizers 0.1-3.0, solubilizers 5.0-30.0, perfume 0.03-0.5, and H2O 65.0-85.0%. Thus, a spray liquid contained Na lauryl sulfate 6.0, Na CM-cellulose 1.0, ethanol 10.0, isopropanol 3.0, propylene glycol 1.0, jasmine essence 0.2, and H2O 78.8%.

IT 3088-31-1, Diethylene glycol lauryl ether sodium sulfate (surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes)

RN3088-31-1 HCAPLUS

CNEthanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

Na

- ICM C09K003-24 IC
- CC 42-10 (Coatings, Inks, and Related Products) Section cross-reference(s): 46
- ST spray surfactant artificial snow flake; soap spray artificial snow flake; foam stabilizer spray artificial snow flake; solubilizer spray artificial snow flake

IT Sulfonates

> (alkanesulfonates, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes)

IT Sulfonates

Sulfonates

(alkenesulfonates, surfactants; spray ligs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes)

ITPolyoxyalkylenes, uses (alkyl ethers, surfactants; spray ligs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) TT Phenols, uses (alkyl, ethoxylated, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Surfactants (amphoteric; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) Surfactants IT (anionic; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) TΨ Propellants (sprays and foams) (butane and compressed air; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) Fatty acids, uses TT (coco, ethanolamides, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Air (compressed, propellants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) TΥ Flower Jasmine (Jasminum) Lemon (Citrus limon) Lemon (Citrus limon) (essence; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Fatty acids, uses (esters, sulfonated, salts; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Alcohols, uses (ethoxylated, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Amides, uses (fatty, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Polymers, uses (foam stabilizers; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Stabilizing agents (foams; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) Essences IT Essences (lemon; spray liqs. containing foaming surfactants and

foam stabilizers and solubilizers and perfumes for

artificial snow flakes)

IT Surfactants (nonionic; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) TΤ (potassium; spray ligs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT (sodium; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) ΙT Alcohols, uses (solubilizers; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Perfumes (spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Coating process (spray; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT Alkenes, uses Alkenes, uses (sulfonates, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) Amino acids, uses TT Betaines Esters, uses (surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT 137-20-2, Igepon T (Igepon T, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT 9005-66-7, Tween 40 (Tween 40, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT 7664-93-9, Sulfuric acid, uses (alc. esters, salts, surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) IT 9000-01-5, Gum arabic 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Polyacrylic acid 9004-32-4 9004-62-0, Hydroxyethylcellulose 9004-67-5, Methylcellulose 9005-25-8, Starch, uses (foam stabilizers; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes) TΤ 106-97-8, Butane, uses (propellants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes)

67-63-0,

56-81-5, Glycerol, uses 64-17-5, Ethanol, uses

26264-14-2, Propanediol

IT

Isopropanol, uses

(solubilizers; spray liqs. containing foaming
surfactants and foam stabilizers and
solubilizers and perfumes for artificial snow flakes)

IT 822-12-8, Sodium tetradecanoate

(spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes)

IT 98-11-3D, Benzenesulfonic acid, alkyl, salts, uses 111-42-2D,
Diethanolamine, coco fatty acid amides 120-40-1, Lauric acid
diethanolamide 151-21-3, Sodium dodecyl sulfate, uses
3088-31-1, Diethylene glycol lauryl ether sodium sulfate
3546-96-1, Sodium laurylaminopropionate 6148-96-5, Propyl
α-sodiosulfododecanoate 7423-32-7, Disodium lauryl
phosphate 9016-45-9, Polyoxyethylene nonylphenyl ether
9036-19-5, Polyoxyethylene octylphenyl ether 25155-30-0, Sodium
dodecylbenzenesulfonate 25322-68-3D, Polyethylene glycol, alkyl
ethers 25339-99-5, Sucrose monolaurate 25496-92-8, Sucrose
monooleate 25915-57-5, Sucrose dilaurate

(surfactants; spray liqs. containing foaming surfactants and foam stabilizers and solubilizers and perfumes for artificial snow flakes)

L40 ANSWER 8 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000

2000:63216 HCAPLUS

DOCUMENT NUMBER:

132:124549

TITLE:

Antibacterial cleaning composition with good

storability for kitchen uses

INVENTOR(S):

Takano, Katsuyuki; Maruta, Kazunari

PATENT ASSIGNEE(S):

Kao Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	\ KIND	DATE	APPLICATION NO.	DATE
 JP 2000026885	A2	20000125	JP 1998∹191349	
JP 2000026885	A2		JP 1998-191349	1998
				0707
			<	
PRIORITY APPLN. INFO.:			JP 1998-191349	
				1998
				0707

AB Title composition, useful for cleaning sponges, chopping boards, dishes, vegetables, and fruits, etc., comprises (A) surfactants 1-80, (B) polylysine 0.0001-1, and (C) ≥1 compound selected from 2-bromo-2-nitropropane-1,3-diol, 1,2-benzisothiazolin-3-one, and 5-chloro-2-methyl-4-isothiazolin-3-one 0.00001-0.2 wt%. Thus, a cleaning agent comprising tetraethylene glycol dodecyl ether Na sulfate 13, dodecyl di-Me amine oxide 2, palm-kernel fatty acid diethanolamide 4, CH3(CH2)11CONH(CH2)3N+(CH3)2CH2COO- 2, ε-polylysine 0.5, 2-bromo-2-nitropropane-1,3-diol 0.02, and H2O showed good foaming ability, cleaning power, and antibacterial effect against Escherichia coli and Staphylococcus aureus even after high temperature storage.

IT 3088-31-1

(preparation of antibacterial cleaning composition with good storability for kitchen uses)

RN 3088-31-1 HCAPLUS

 $Me^{-(CH_2)}_{11} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

Na

IC ICM C11D001-00

ICS C11D003-26; C11D003-33; C11D003-34; C11D003-37

46-6 (Surface Active Agents and Detergents)

ST antibacterial cleaning agent kitchen storability; bromonitropropanediol surfactant polylysine cleaning agent antibacterial storability

IT Amides, uses

CC

(N-(hydroxyalkyl); preparation of antibacterial cleaning composition with good storability for kitchen uses)

IT Surfactants

(amphoteric; preparation of antibacterial cleaning composition with good storability for kitchen uses)

IT Surfactants

(anionic; preparation of antibacterial cleaning composition with good storability for kitchen uses)

IT Detergents

(dishwashing; preparation of antibacterial cleaning composition with good storability for kitchen uses)

IT Surfactants

(nonionic; preparation of antibacterial cleaning composition with good storability for kitchen uses)

IT Fatty acids, uses

(palm kernel-oil, diethanol amide; preparation of antibacterial cleaning composition with good storability for kitchen uses)

IT Antibacterial agents

(preparation of antibacterial cleaning composition with good storability for kitchen uses)

IT 52-51-7, 2-Bromo-2-nitropropane-1,3-diol 1643-20-5,
 Dodecyl dimethyl amine oxide 2634-33-5, 1,2-Benzisothiazolin-3 one 3055-94-5, Triethylene glycol dodecyl ether 3055-97-8,
 Heptaethylene glycol dodecyl ether 3088-31-1 9004-82-4
 25104-18-1, Lysine homopolymer 25729-05-9 26172-55-4,
 5-Chloro-2-methyl-4-isothiazolin-3-one 28211-04-3 29963-33-5,
 Sodium α-Tetradecenesulfonate 69227-93-6 109040-59-7,
 Glucose caprate

(preparation of antibacterial cleaning composition with good storability for kitchen uses)

L40 ANSWER 9 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:23701 HCAPLUS

DOCUMENT NUMBER:

132:65772

TITLE:

Sulfation and sulfonation methods for organic compounds and production methods for

surfactants therewith

INVENTOR(S):

Yamada, Hiroaki; Toyama, Naoaki

PATENT ASSIGNEE(S):

SOURCE:

Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

Lion Corp., Japan

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 2000007644 A2 20000111 JP 1998-178941 1998 0625

PRIORITY APPLN. INFO.:

JP 1998-178941

1998 0625

<--

Petroleum or vegetable oils are sulfated or sulfonated and AB defoamed to give products, and the separation is controlled to allow the deviation of the acid number after the reaction and after the separation to fall into a set limit. Thus, triethylene glycol lauryl ether was treated with SO3 and separated with the deviation of acid number 0-1.

IT 14960-11-3P, Triethylene glycol dodecyl ether sulfate (sulfation and sulfonation of organic compds. for surfactants)

RN 14960-11-3 HCAPLUS

CN Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate (8CI, 9CI) (CA INDEX NAME)

Me- (CH₂)₁₁-O-CH₂-CH₂-O-CH₂-CH₂-O-CH₂-CH₂-OSO₃H

IC ICM C07C303-06

ICS B01F017-04; B01F017-08; B01F017-12; C07C309-01; C07C309-20

46-3 (Surface Active Agents and Detergents)

Section cross-reference(s): 23, 25

14960-11-3P, Triethylene glycol dodecyl ether sulfate (sulfation and sulfonation of organic compds. for surfactants)

L40 ANSWER 10 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:741974 HCAPLUS

DOCUMENT NUMBER:

132:50521

TITLE:

SOURCE:

Polymer gels and surfactants - Their interactions and hybrid materials

AUTHOR (S):

Tsujii, Kaoru

CORPORATE SOURCE:

The DEEPSTAR Group, Japan Marine Science and

Technology Center, Yokosuka, 237-0061, Japan Nippon Kagaku Kaishi (1999), (11),

701-713

CODEN: NKAKB8; ISSN: 0369-4577

PUBLISHER:

Nippon Kagakkai

DOCUMENT TYPE:

Journal

LANGUAGE: Japanese

The interactions and hybrid materials between polymer hydrogels and surfactants were overviewed. The volume phase transition behavior of poly(N-isopropylacrylamide) gel (NIPA) is

dramatically changed on addition of some surfactants, depending upon the chemical structure of the agents. In order to elucidate the above, binding isotherms of the surfactants onto the NIPA gel have been measured. Discontinuous and reversible binding was first observed in the NIPA gel/ionic surfactant systems. The phase transition of the gel also took place at the same concentration of the agent as that of the discontinuous binding. The binding affinity of surfactants is, then, switched by the conformational change of the polymer chains through its phase transition. affinity switching is a good mimic of protein functions such as oxygen uptake of Hb and/or catalytic process of enzymes. The increments of the phase transition temperature of the NIPA gel on addition of a surfactant are linearly related to the binding amount of the agent at the transition point. This means that the binding ability of surfactant governs the phase transition temperature of NIPA gel. A hybrid material of polymer hydrogels and bilayer membranes has been first synthesized and characterized. A polymerizable surfactant, 2,3-dihydroxypropyl dodecyl itaconate (DDI), forms an iridescent solution resulting from a periodic structure of bilayer membranes. This iridescent lamellar structure of DDI can be photo-polymerized by UV-light together with water-soluble monomers such as acrylamide, NIPA and N, N'-methylenebisacrylamide (a cross linker). The bilayer-membranes-immobilized polymer gels thus obtained show some unique properties that are not obtained from either component. Anisotropic gels obtained by photo-polymerization after shear flow of the monomer mixts. show interesting anisotropic behaviors in swelling, optical and mech. properties.

RN 15826-16-1 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11}-O^{-CH_2}-CH_2-OSO_3H$

Na

CC

Section cross-reference(s): 46 ST polyisopropylacrylamide gel surfactant interaction IT Polymer morphology Surfactants (interaction between polymer gels and surfactants) IT 90398-43-9 (interaction between polymer gels and surfactants) IT 112-00-5, Dodecyltrimethylammonium chloride 151-21-3, Sodium dodecyl sulfate, properties 929-73-7, Dodecylamine hydrochloride 2386-53-0, Sodium dodecanesulfonate 9002-92-0, Polyethylene glycol monododecyl ether 9016-45-9, Polyethylene glycol monononylphenyl ether 15826-16-1, Sodium [2-(dodecyloxy(ethyl] sulfate 15827-29-9 55656-86-5, Potassium tridecanoate

(surfactant; interaction between polymer gels and

36-7 (Physical Properties of Synthetic High Polymers)

surfactants)

L40 ANSWER 11 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:422709 HCAPLUS

DOCUMENT NUMBER: 131:311922

TITLE: Effect of polyoxybutylene chain length on the

properties of alkyl sodium sulfates in aqueous

solution

AUTHOR(S): Chlebicki, J.

CORPORATE SOURCE: Institute Organic Polymer Technology, Wroclaw

Univ. Technology, Wroclaw, 50370, Pol. Progress in Colloid & Polymer Science (

SOURCE: Progress in Colloid & Polymer Science (

1999), 112(Trends in Colloid and Interface Science XIII), 136-139 CODEN: PCPSD7; ISSN: 0340-255X

PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

The micelle formation and adsorption phenomena at the air-water interface of polyoxybutylenenated higher alc. sodium sulfates (RO[CH2CH(C2H5)O]m SO3Na where R = C8H17, C10H21, C12H25, C14H29,and m = 1, 2, 3, and 4) were investigated in aqueous solution by surface tension measurements over a concentration range 10-5-10-2 mol/dm3 at 20°. These were synthesized from C8-C14 alcs. and α -butylene oxide and subsequently sulfated with ClSO3H. critical micelle concentration (CMC) and Gibbs free-energy change of micellization, \(\Delta Gmic^{\circ} \), were determined from the surface tension data of the solns. It was found that the CMC values of the compds. studied decrease with the increasing chain length of polyoxybutylene and the increasing number of C atoms in the alkyl group. The change in cohesion energy, WBO = 1.85 kT, for polyoxybutylene chains was determined (0.60 per oxybutylene unit). This is comparable with the van der Waals energy of interaction per CH2 group, WCH2, in adjacent hydrocarbon chains due to micelle formation.

TT 78099-55-5P 78099-56-6P 247911-18-8P 247911-19-9P 247911-20-2P 247911-21-3P 247911-22-4P 247911-23-5P 247911-24-6P 247911-25-7P 247911-26-8P 247911-27-9P 247911-28-0P

(polyoxybutylene chain length effects on properties of alkyl sodium sulfates in aqueous solution)

RN 78099-55-5 HCAPLUS

CN Ethanol, ethyl-2-[ethyl-2-(tetradecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

2 (D1-Et)

Na

RN 78099-56-6 HCAPLUS

 $\label{eq:me-ch2-ch2-ch2-ch2-ch2-ch2-oso_3h} \ \ \text{Me- (CH2)} \ \ 11^- \ \text{O- CH2- CH2- O- CH2- CH2- OSO_3h}$

2 (D1-Et)

■ Ma

RN 247911-18-8 HCAPLUS

CN Butanol, 1(or 2)-(octyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_7-O-CH_2-CH_2-OSO_3H}$

D1-Et

Na

RN 247911-19-9 HCAPLUS

CN Butanol, 1(or 2)-[ethyl-2-(octyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\label{eq:me-ch2-ch2-ch2-ch2-ch2-ch2-oso_3h} \ \ \text{Me- (CH2)} \ 7^- \ O^- \ CH2^- \ CH2^- \ O^+ \ CH2^- \ CH2^- \ OSO_3 \ H$

2 (D1-Et)

Na

RN 247911-20-2 HCAPLUS

CN Butanol, 1(or 2)-[ethyl-2-[ethyl-2-(octyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\text{Me-} \ (\text{CH}_2) \ 7 - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{OSO}_3 \text{H}$

3 (D1-Et)

Na

RN 247911-21-3 HCAPLUS

CN 3,6,9,12-Tetraoxaeicosan-1-ol, tetraethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\text{Me} - (\text{CH}_2)_7 - \text{O} - \text{CH}_2 - \text{CH}_2 - \text{O} + \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{O} + \text{CH}_2 - \text{CH}_2 -$

4 (D1-Et)

Na

RN 247911-22-4 HCAPLUS

CN Butanol, 1(or 2)-(decyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}9^{-O-CH_2-CH_2-OSO_3H}$

D1-Et

Na

RN 247911-23-5 HCAPLUS

CN Butanol, 1(or 2)-[2-(decyloxy)ethylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)} \circ ^{-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

2 (D1-Et)

Na

RN 247911-24-6 HCAPLUS

CN Butanol, 1(or 2)-[2-[2-(decyloxy)ethylethoxy]ethylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)} = 0 - CH_2 - CH_2 - O - CH_2 - CH_2 - O - CH_2 - CH_2 - OSO_3H$

3 (D1-Et)

Na

RN 247911-25-7 HCAPLUS

CN 3,6,9,12-Tetraoxadocosan-1-ol, tetraethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

Me- (CH2) 9-0-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-OSO3H

4 (D1-Et)

Na

RN 247911-26-8 HCAPLUS

CN Butanol, 1(or 2)-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

D1-Et

Na

247911-27-9 HCAPLUS RN

Butanol, 1(or 2)-[2-[2-(dodecyloxy)ethylethoxy]ethylethoxy]-, CN hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11}-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-OSO_3H$

3 (D1-Et)

Na

247911-28-0 HCAPLUS RN

CNButanol, 1(or 2)-(tetradecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-OSO_3H}$

D1-Et

Na

CC 46-3 (Surface Active Agents and Detergents)

IT78099-55-5P 78099-56-6P 247911-18-8P

247911-19-9P 247911-20-2P 247911-21-3P

247911-22-4P 247911-23-5P 247911-24-6P

247911-25-7P 247911-26-8P 247911-27-9P

247911-28-0P

(polyoxybutylene chain length effects on properties of alkyl

sodium sulfates in aqueous solution)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L40 ANSWER 12 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:742356 HCAPLUS

DOCUMENT NUMBER: 130:14903 TITLE:

Wetting agent for use in aqueous treatment

baths for textile fibers

INVENTOR(S):

Held, Egon; Hois, Pia; Freyberg, Peter

PATENT ASSIGNEE(S):

BASF A.-G., Germany Ger. Offen., 12 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19719688	A1	19981112	DE 1997-19719688	
				1997
				0509
			<	

PRIORITY APPLN. INFO.:

DE 1997-19719688

1997

0509

OTHER SOURCE(S): MARPAT 130:14903

The title wetting agents contain polyoxyalkylene ether sulfates and/or polyoxyalkylene monoalkyl ethers of specified structure. Adding 0.4 mol 1,2-epoxydodecane slowly to 1.36 mol 1-hexanol and 0.6 mol NaOH stirred at 40-50° and stirring at .apprx.70° until reaction was complete gave C6H13OCH2CH(C10H21)OH. The alkali stabilities and contact angles of aqueous solns. of the products vs. PTFE are given.

215943-66-1P 215943-73-0P 215943-76-3P 215943-81-0P 215943-83-2P 215943-87-6P 215943-89-8P 215943-92-3P 215944-00-6P 215944-03-9P 215944-06-2P 215944-10-8P

> (wetting agent for use in aqueous treatment baths for textile fibers)

RN 215943-66-1 HCAPLUS

2-Decanol, 1-butoxy-, hydrogen sulfate (9CI) (CA INDEX NAME) CN

$$^{
m OSO_3H}_{
m |}$$
 $_{
m n-BuO-CH_2-CH-(CH_2)_7-Me}$

215943-73-0 HCAPLUS RN

2-Dodecanol, 1-butoxy-, hydrogen sulfate (9CI) (CA INDEX NAME)

PN 215943-76-3 HCAPLUS

2-Decanol, 1-(pentyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME) CN

$$\begin{array}{c} {\rm OSO_3H} \\ | \\ {\rm Me^- \; (CH_2)_4 - O - CH_2 - CH - \; (CH_2)_7 - Me} \end{array}$$

RN 215943-81-0 HCAPLUS

CN 2-Decanol, 1-(hexyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm OSO_3H} \\ | \\ {\rm Me^- \; (CH_2)_{\, 5}-O-CH_2-CH- \; (CH_2)_{\, 7}-Me} \end{array}$$

RN 215943-83-2 HCAPLUS

CN 2-Decanol, 1-(heptyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}$$
 Me- (CH₂)₆-O-CH₂-CH- (CH₂)₇-Me

RN 215943-87-6 HCAPLUS

CN 2-Decanol, 1-(octyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OSO}_{3}\text{H} \\ | \\ \text{Me- (CH}_{2})_{\,7}\text{--O-CH}_{2}\text{--CH- (CH}_{2})_{\,7}\text{--Me} \end{array}$$

RN 215943-89-8 HCAPLUS

$$OSO_3H$$
 | OSO_3H |

Na

RN 215943-92-3 HCAPLUS

CN 2-Dodecanol, 1-(octyloxy)-, hydrogen sulfate, potassium salt (9CI) (CA INDEX NAME)

$$OSO_3H$$
|
Me- (CH₂)₇-O-CH₂-CH- (CH₂)₉-Me

K

RN 215944-00-6 HCAPLUS

CN Ethanol, 2-[2-[[1-(butoxymethyl)undecyl]oxy]ethoxy]-, hydrogen
sulfate (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H} \\ \\ {\rm n-BuO-CH_2-CH-(CH_2)_9-Me} \end{array}$$

RN 215944-03-9 HCAPLUS

CN Ethanol, 2-[2-[[1-[(pentyloxy)methyl]nonyl]oxy]ethoxy]-, hydrogen
sulfate (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O-CH}_2\text{--CH}_2\text{--O-CH}_2\text{--CH}_2\text{--OSO}_3\text{H} \\ | \\ \text{Me- (CH}_2)_4\text{--O-CH}_2\text{--CH--(CH}_2)_7\text{--Me} \end{array}$$

RN 215944-06-2 HCAPLUS

CN Ethanol, 2-[2-[[1-[(hexyloxy)methyl]pentyl]oxy]ethoxy]-, hydrogen sulfate (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O-} \text{CH}_2\text{--} \text{CH}_2\text{--} \text{O-} \text{CH}_2\text{--} \text{CH}_2\text{--} \text{OSO}_3\text{H} \\ \\ \text{Me-} \text{ (CH}_2\text{)}_5\text{--} \text{O-} \text{CH}_2\text{--} \text{CH-} \text{Bu-n} \end{array}$$

RN 215944-10-8 HCAPLUS

CN Ethanol, 2-[2-[[1-[(octyloxy)methyl]nonyl]oxy]ethoxy]-, hydrogen
sulfate (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O-CH}_2\text{--CH}_2\text{--O-CH}_2\text{--CH}_2\text{--OSO}_3\text{H} \\ | \\ \text{Me- (CH}_2)_7\text{--O-CH}_2\text{--CH--(CH}_2)_7\text{--Me} \end{array}$$

IC ICM C07C305-10

ICS C07C043-13; C07C303-24; C07C041-03; C11D001-29; C11D001-72; C08G065-20; C08G065-32; D06M013-17; D06M013-262; D06M015-53

ICA B01F017-42; B01F017-02

CC 40-9 (Textiles and Fibers)

Section cross-reference(s): 46

IT 26720-84-3P 26720-88-7P 148061-90-9P 203438-11-3P 215943-09-2P 215943-19-4P 215943-22-9P 215943-33-2P 215943-40-1P 215943-45-6P 215943-51-4P 215943-54-7P 215943-57-0P 215943-59-2P 215943-64-9P 215943-66-1P 215943-73-0P 215943-76-3P 215943-81-0P 215943-83-2P 215943-87-6P 215943-89-8P 215943-95-6P 215943-92-3P 215943-98-9P 215944-00-6P 215944-03-9P 215944-06-2P

215944-08-4P **215944-10-8P** 216163-54-1P 216163-55-2P (wetting agent for use in aqueous treatment baths for textile fibers)

L40 ANSWER 13 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:685352 HCAPLUS

DOCUMENT NUMBER:

130:19711

TITLE:

Electroconductive polyaniline-based electrolyte, its manufacture, and solid electrolytic capacitor using the same Tatemori, Hiroshi; Yutani, Yuji; Tokai,

INVENTOR(S):

Masaya; Uno, Keiichi

PATENT ASSIGNEE(S): SOURCE: Toyobo Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10284350	A2	19981023	JP 1997-86621	
			•	1997
				0404
			<	
PRIORITY APPLN. INFO.:			JP 1997-86621	
				1997
			',	0404

OTHER SOURCE(S): MARPAT 130:19711

The electrolyte comprises a polyaniline (derivative) composition containing a protonic acid as a dopant, shows elec. conductivity ≥10-9 S/cm, is soluble in a doped state, and satisfies relationship Md/Pn 350-2000 [Md = mol. weight of dopant; Pn = number of protonic acid groups of pKa (/mol.) ≤4.0]. The dopant may be represented by C6R1'k'(COCH2CH2OCH2CH2OR1)k SO3H (R1 = H, C1-15 substituents; R1' = H, substituents; k = 1-5; k' = 0-4; k + k' = 5) or R2O(CH2CH2O)pSO3H (R2 = C5-20 substituents; p = 1-5). The electrolyte is manufactured by applying a solution containing the polyaniline composition on a oxide-coated metal substrate and drying. A solid electrolytic capacitor using the electrolyte is also claimed.

IT 13150-00-0P

(dopant; solvent-soluble doped polyaniline electrolyte for manufacture of solid electrolytic capacitor by coating process)

RN 13150-00-0 HCAPLUS

CN Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

IC ICM H01G009-028 ICS H01G009-00

CC 76-10 (Electric Phenomena)
Section cross-reference(s): 38

IT 13150-00-0P 178374-58-8P

(dopant; solvent-soluble doped polyaniline electrolyte for manufacture of solid electrolytic capacitor by coating process)

L40 ANSWER 14 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:574681 HCAPLUS

DOCUMENT NUMBER: 129:317960

TITLE: Study on the physicochemical properties of the

hydroxylpropoxylated sulfonate surfactant and

its complexed systems

AUTHOR(S): Lu, Shaofen; Zou, Zhichen; Hao, Jingcheng;

Zhang, Guangyou

CORPORATE SOURCE: Department of Chemistry, Shandong Normal

University, Ji'nan, 250014, Peop. Rep. China

SOURCE: Riyong Huaxue Gongye (1997), (6),

1-6

CODEN: RHGOE8; ISSN: 1001-1803

PUBLISHER: Qinggongyebu Kexue Jishu Qingbao Yanjiuso

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB The new hydroxylpropoxylated sulfonate surfactant ROEnPmSO3Na (E = OCH2H2, P = OCH2H(OH)CH2, R = C12H25, C16H33, n = 0, 1, 2, 3, m = 0, 1) were synthesized. The physicochem. properties of the surfactant systems and their complexed systems were studied. The surface activity increased when hydroxylpropyl was introduced, and the Ca soap dispersing force was significantly increased. The efficacy of a hydroxylpropyl had the advantage over oxyethyl group.

IT 3088-31-1P 13150-00-0P 15826-16-1P

25446-80-4P 43168-25-8P

(surfactant; physicochem. properties of ethoxylated propoxylated sulfonates surfactants and their complexed systems)

RN 3088-31-1 HCAPLUS

CN Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 13150-00-0 HCAPLUS

CN Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 15826-16-1 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

Na

RN 25446-80-4 HCAPLUS

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 43168-25-8 HCAPLUS

 $Me^{-(CH_2)}_{15} = O^{-CH_2} = CH_2 = O^{-CH_2} = CH_2 = O^{-CH_2} = CH_2 = OSO_3H$

Na

CC 46-4 (Surface Active Agents and Detergents)
IT 151-21-3P, uses 3088-31-1P 7308-04-5P

151-21-3P, uses 3088-31-1P 7308-04-5P 13150-00-0P 15826-16-1P 25446-80-4P

43168-25-8P 146293-47-2P 146293-48-3P 146293-50-7P

146293-52-9P

(surfactant; physicochem. properties of ethoxylated propoxylated sulfonates surfactants and their complexed systems)

L40 ANSWER 15 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:407706 HCAPLUS

DOCUMENT NUMBER:

129:137267

TITLE:

Alkali permeation aids for rapid permeation of

alkali solutions by polyester fibers for finishing the fibers for weight loss and

improved drape and luster

INVENTOR(S):

Nagao, Shigeru; Okuno, Takashi; Kakito, Yukio

Kao Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 10168754	, A2	19980623	JP 1996-330582	1996
				1211
			<	
JP 2983917	B2	19991129		
CN 1193624	Α	19980923	CN 1997-120821	
				1997
				1211
			<	
CN 1092666	В	20021016		
PRIORITY APPLN. INFO.:			JP 1996-330582	Α
				1996
				1211

AB The aids contain [R10(A0)n1]n2P(0)(OH)n3 (I; R1 = C1-6 linear or branched aliphatic alkyl; AO = oxyalkylene, oxypropylene; n1 = 0-6; n2 = 1-2; n3 = 1-2; n2+n3 = 3) or salts of I and [R2O(AO)m1]m2P(O)(OH)m3 (II; R2 = C7-9 branched aliphatic alkyl; m1 = 0-6; m2 = 1-2; m3 = 1-2; m2+m3 = 3) or salts of II or R2O(AO)m1S+(O)O-OH (III) or salts of III. A polyester tropical was contacted with an aqueous solution containing 20% NaOH and 0.5% of 90:10 (weight ratio) mixture of diethylene glycol monoethyl ether Et phosphate sodium salt and 2-ethylhexyl sulfate sodium salt at 20° to show time required for complete wetting of the fabric 0.5 s.

210467-92-8P IT

> (phosphate esters and sulfate esters as alkali permeation aids for rapid permeation of alkali solns. by polyester fibers for finishing for weight loss)

RN 210467-92-8 HCAPLUS

CN Ethanol, 2-[2-[(2-ethylhexyl)oxy]ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$_{\rm CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$$
 = t-CH-Bu-n

Na

ICM D06M013-256 IC

ICS D06M013-292

CC 40-9 (Textiles and Fibers)

IT 126-92-1P, 2-Ethylhexyl sulfate sodium salt 90604-91-4P 210467-89-3P 210467-90-6P 210467-91-7P **210467-92-8P** 210480-94-7P 210648-02-5P 210648-04-7P (phosphate esters and sulfate esters as alkali permeation aids

for rapid permeation of alkali solns. by polyester fibers for finishing for weight loss)

L40 ANSWER 16 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:282388 HCAPLUS

DOCUMENT NUMBER:

128:323186

TITLE:

Mild foaming and conditioning detergents

INVENTOR(S):

Patel, Amrit M.

PATENT ASSIGNEE(S):

Colgate-Palmolive Co., USA

SOURCE:

U.S., 12 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				,
	_			
US 5747435	A	19980505	US 1996-682494	
				1996
			•	0717
			<	
PRIORITY APPLN. INFO.:			US 1996-682494	
				1996
				0717

AB Composition useful as 2-in-1 cleansing products are disclosed that are extremely mild to skin and hair, which use neutralized, essentially chargeless, ionic complexes of fatty amines and fatty acids to deliver various levels of conditioning; neutralized, essentially chargeless, ionic complexes of a detersive surfactant comprising a water soluble cationic surfactant and/or polymer complexed with one or more anionic surfactants; or an amphoteric surfactant complexed with one or more anionic surfactants; or a water soluble cationic surfactant and/or polymer complexed with one or more amphoteric surfactants; or a water soluble cationic surfactant and/or polymer complexed with one or more anionic surfactants and an amphoteric surfactant; detersive surfactantsoluble but water-insol. silicones or derivs. thereof; and water. These products exhibit true 2-in- conditioning properties, and are lower in cost than current 2 in 1 products. Clear or opacified products can be formulated.

ΙT 3088-31-1

(mild foaming and conditioning detergents)

RN 3088-31-1 HCAPLUS

Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt CN (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

IC ICM C11D001-12

ICS C11D001-88; C11D001-94; C11D009-36

INCL 510119000

46-6 (Surface Active Agents and Detergents)

Section cross-reference(s): 62

ST shampoo conditioning surfactant anionic amphoteric hydrotrope

IT Surfactants

(amphoteric; mild foaming and conditioning detergents)

IT Hydrotropes

Surfactants

(anionic; mild foaming and conditioning detergents)
IT 112-92-5, Stearyl alcohol 3088-31-1 9002-92-0D,
 carboxylic derivs. 9016-00-6, Dimethylsilanediol homopolymer,
 sru 24991-55-7, Polyethylene glycol dimethyl ether 25322-68-3
 25322-69-4D, Polypropylene glycol, siloxane derivs. 26590-05-6
 28348-53-0, Sodium cumenesulfonate 31900-57-9,
 Dimethylsilanediol homopolymer 36574-66-0D, cocoamido derivs.
 67799-04-6, Isostearamidopropyldimethylamine 81859-24-7,
 Polyquaternium 10 135843-95-7, Polypropylene glycol oleate
 207133-53-7

(mild foaming and conditioning detergents)

8

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

APPLICATION NO.

DATE

L40 ANSWER 17 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:175059 HCAPLUS

DOCUMENT NUMBER:

126:173389

TITLE:

Branched chain ethoxylated alcohols and sulfates and their use in detergent formulations, cleaners, and brighteners Sauer, Joe D.; Zaweski, Edward F.; Tuvell,

INVENTOR(S):

Melvin E.; Trowbridge, Francis A.; Bunch,

David W.

PATENT ASSIGNEE(S):

Albemarle Corporation, USA PCT Int. Appl., 20 pp.

SOURCE:

CODEN: PIXXD2

DATE

DOCUMENT TYPE:

Patent

LANGUAGE:

English

KIND

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

WO	9700843	A1	19970109	WO 1996-US10634	1996
•					0620
				<	
	W: CA, JP				
			K, ES, FI,	FR, GB, GR, IE, IT, LU,	MC,
CA	NL, PT, S		19970109	CA 1996-2225339	
CA	2223333	m	15570105	CA 1990 2223339	1996
					0620
				<	
EP	846094	A1	19980610	EP 1996-921717	
					1996
					0620
77	045004	5.1	00010405	<	•
EP	846094		20010425		
.TD	R: DE, FR, G 11508261	T2	19990721	JP 1996-503948	
O F	11300201	12	19990721	01 1000-303040	1996
					0620
				<	
PRIORIT	Y APPLN. INFO.:			US 1995-493189	A.
					1995
					0620

WO 1996-US10634

1996

0620

0227

OTHER SOURCE(S): MARPAT 126:173389

Certain branched chain compds. such as double-tailed alc. ethoxylates Rz(OC2H4)wOH (R = alkyl branched in 3 position with each branch an C1-4-alkyl; z = number C atoms in R 15-33, w = 1-6.5) and double-tailed alc. ether sulfates RzO(C2H4O)wSO3M (M = alkali metal, ammonium, or alkylolammonium) are prepared Thus, 3-hexyl-1-undecanol was either ethoxylated (KOH catalyzed) or treated (Cl-containing intermediate) with triethylene glycol (Williamson ether synthesis) to give a surfactant, b. 187-197°, and readily converted to the sulfate.

183237-64-1P IT

> (branched chain ethoxylated alcs. and sulfates and their use in detergent formulations, cleaners, and brighteners)

RΝ 183237-64-1 HCAPLUS

Ethanol, 2-[2-[2-[(3-hexylundecyl)oxy]ethoxy]-, hydrogen CN sulfate, sodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H} \\ \\ | \\ {\rm Me-} \ ({\rm CH_2}) \ {\rm 5-CH-} \ ({\rm CH_2}) \ {\rm 7-Me} \end{array}$$

Na

ICM C07C043-11 IC ICS C07C305-06

ICA C11D001-29

46-3 (Surface Active Agents and Detergents)

Section cross-reference(s): 23

IT 183237-57-2P 183237-63-0P 183237-64-1P (branched chain ethoxylated alcs. and sulfates and their use in detergent formulations, cleaners, and brighteners)

L40 ANSWER 18 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:9920 HCAPLUS

DOCUMENT NUMBER:

126:105773

TITLE:

Cleaner/degreaser concentrate compositions

INVENTOR(S): Van, Eenam Donald N.

PATENT ASSIGNEE(S):

Buckeye International, Inc., USA

SOURCE:

U.S., 17 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5585341	A	19961217	US 1995-394797	1995

US 5849682	Α	19981215	us	< 1996-714880		
						1996 0917
				<		
US 6423677	B1	20020723	US	2001-951858		
						2001
						0913
				<		
PRIORITY APPLN. INFO.:			US	1995-394797	A3	
						1995
						0227
	•			<		
			ŲS	1996-714880	A3	٠.
						1996
						0917
				<		
			US	1998-151101	В1	
						1998
						0910

AB Nonaq. concs. for use in preparing stable, aqueous cleaner/degreaser compns. in the form of totally water sol. solns. comprise (a) 1-phenoxy-2-propanol, (b) a solubilizing additive consisting of 0.1-100% of a surfactant and 0-99.9% of a coupler, the solubilizing additive being present in an amount of 3-15% excess over that minimally required to form a clear solution when the concentrate is combined with water, and (c) no added water; where the concentrate forming a barely clear, totally water soluble solution when diluted with water to produce a solution having the desired cleaning/degreasing strength. The surfactants can be anionic, cationic, nonionic, or amphoteric surfactants.

IT 67656-24-0

(cleaner/degreaser concentrate compns.)

RN 67656-24-0 HCAPLUS

CN Ethanol, 2-butoxy-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $n-BuO-CH_2-CH_2-OSO_3H$

Na

IC ICM C11D001-86 ICS C11D001-94; C11D003-43

INCL 510365000

CC 46-6 (Surface Active Agents and Detergents)

ST phenoxypropanol degreaser cleaner conc; surfactant degreaser cleaner

IT Degreasing agents

Detergents

Surfactants

(cleaner/degreaser concentrate compns.)

IT 60-12-8, β-Phenylethanol 62-53-3, Aniline, uses 78-59-1, Isophorone 94-96-2, 2-Ethyl-1,3-hexanediol 100-51-6, Benzyl

alcohol, uses 100-52-7, Benzaldehyde, uses 100-71-0, 102-71-6, uses 107-43-7D, Betaine, 2-Ethylpyridine cocoamidopropyl 107-95-9D, β-Aminopropionic acid, N-coco 110-91-8D, Morpholine, tall oil fatty acid salts, uses Lauric diethanolamide 122-99-6 126-73-8, Tri-n-butyl phosphate, uses 142-15-4 143-00-0, Diethanolamine lauryl sulfate 143-19-1, Sodium oleate 151-21-3, Sodium lauryl 513-08-6, Tri-n-propylphosphate 515-42-4, Sodium sulfate, uses 636-72-6, 2-Thiophenemethanol 657-84-1, benzene sulfonate Sodium toluene sulfonate 770-35-4, 1-Phenoxy-2-propanol 1300-72-7, Sodium xylene sulfonate 1331-61-9, Ammonium dodecylbenzene sulfonate 1696-17-9, N,N-Diethylbenzamide 1875-92-9D, Dimethyl benzyl ammonium chloride, alkyl derivs. 2168-93-6, n-Butyl sulfoxide 2390-68-3, Didecyldimethylammonium 3655-00-3 5197-80-8D, Dimethyl ethylbenzyl ammonium chloride, alkyl derivs. 5324-84-5, Sodium octane-1-sulfonate 9002-92-0 9002-93-1, Triton X-102 9004-81-3 9004-82-4, Sodium laureth(3) sulfate 9005-67-8 9014-92-0 9016-45-9. 9063-06-3 T-Det N-14 9063-89-2 10124-65-9, Potassium laurate 12068-08-5, Morpholinium dodecylbenzene sulfonate 14047-60-0, Sodium pelargonate 15015-81-3, Sodium hexadecane-1 sulfonate 19766-89-3, Sodium 2-ethylhexanoate 24938-91-8 25155-30-0, Sodium dodecylbenzene sulfonate 25339-99-5, Sucrose monolaurate 26248-24-8, Sodium tridecylbenzene sulfonate 26264-05-1, Isopropylamine dodecylbenzene sulfonate 26447-10-9, Ammonium 26635-75-6 26764-43-2 26896-18-4, xylene sulfonate Isononanoic acid 27140-00-7 27176-87-0, Dodecylbenzenesulfonic 27177-77-1, Potassium dodecylbenzene sulfonate 27177-78-2, Sodium dinonylbenzene sulfonate 27323-41-7 28348-53-0, Sodium cumene sulfonate 28519-02-0, Sodium dodecyl diphenyloxide disulfonate 29062-31-5, Potassium didodecylbenzene sulfonate 29911-28-2 30260-72-1 34448-38-9 35884-42-5, Dipropylene glycol butyl ether 38815-93-9 41669-40-3. Triethanolamine myristate 50660-84-9 53694-15-8D, Polyethylene glycol sorbitol ether, tall oil fatty acid esters 55196-97-9 61168-61-4, Potassium ethylbenzene sulfonate 56637-93-5 61926-71-4 65060-02-8, Hexadecyltrimethylammonium 61792-31-2 methosulfate 67656-24-0 68877-55-4, Monateric CY-Na-50 85409-98-9, Potassium dimethylnaphthalene sulfonate 94668-42-5, Potassium octadecenylsuccinate 103657-84-7 104977-48-2 107227-50-9 126776-61-2, Monafax 057 128664-37-9, APG 300 132268-32-7, Tomah Q-17-2 134267-38-2 131744-02-0 135945-21-0, Monafax 939 142985-93-1, Monamine ALX-100S 143478-87-9, Bioterge PAS-8S 185224-64-0 185224-65-1 185353-69-9 185325-51-3 (cleaner/degreaser concentrate compns.)

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L40 ANSWER 19 OF 50 HCAPLUS · COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1996:637496 HCAPLUS
DOCUMENT NUMBER:
                         125:303841
TITLE:
                         Formulated branched chain alcohol ether
                         sulfate compounds
INVENTOR(S):
                         Hu, Patrick C.; Corona, Raynold J.
PATENT ASSIGNEE(S):
                         Albemarle Corporation, USA
                         U.S., 6 pp.
SOURCE:
                         CODEN: USXXAM
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
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FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA'	TENT 1	NO.			KIN	D DA'	ΓE	AP	PLICAT:	ION NO.		DATE
	US	5562	- 866			A	19	961008	US	1995-4	193186		1995
													0620
	CA	2225	240			א א	10	070100	. CA	1006	2225340		
	CA	2225.	340			AA	19	,,0103	CA	1330-2	2223340		1996
													0620
										<			
	WO	9700	720			A1	19	3 70109	WO	1996-	JS10639		
													1996 0620
										<			0020
		W:	CA,	JP						·			
		RW:		BE, PT,		DE,	DK, E	3, FI,	FR, G	B, GR,	IE, IT,	LU,	MC,
	EP	8460	25			A1	19	980610	EP	1996-9	919477		
													1996
										<			0620
	ΕP	8460	25			В1	20	000202		\			
				FR,	GB,	IT							
	JP	1150	8306			. T 2	19:	990721	JP	1996-5	503950		
													1996 0620
	m									<			_
PRIOR	KTT.	Y APPI	LN	INFO	. :				US	1995-4	193186	F	1995
			•								·		0620
										<			
									WO	1996-U	JS10639	V	•
													1996
										<			0620
										•			

OTHER SOURCE(S): MARPAT 125:303841

AB Predominately aqueous surfactant formulations comprise: (A) ≥1 alc. ether sulfate RzO(C2H4O)wSO3M where R is an alkyl group which is bifurcated at the 3-position and each branch has at least 4 carbon atoms; M is an alkali metal, ammonium; z is 15-33; and w is 1-6.5 or an average in the range of 1-6.5; and (B) ≥1 hydrotrope or ≥1 cosurfactant, or a combination of ≥1 hydrotrope and ≥1 cosurfactant. The formulations are useful for various surfactant utilities including use in hard water systems.

IT 183237-64-1P

(formulated branched chain alc. ether sulfate compds.)

RN 183237-64-1 HCAPLUS

CN Ethanol, 2-[2-[2-[(3-hexylundecyl)oxy]ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\begin{array}{c} {\rm CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H} \\ \\ {\rm Me-} \ ({\rm CH_2})_{\, 5}-{\rm CH-} \ ({\rm CH_2})_{\, 7}-{\rm Me} \end{array}$

Na

IC ICM C11D001-14

INCL 510432000

CC 46-4 (Surface Active Agents and Detergents)

IT 183237-64-1P

(formulated branched chain alc. ether sulfate compds.)

L40 ANSWER 20 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:509562 HCAPLUS

DOCUMENT NUMBER: 125:225094

TITLE: Effect of Hard River Water on the Surface

Properties of Surfactants

AUTHOR(S): Rosen, Milton J.; Zhu, Yun-Peng; Morrall,

Stephen W.

CORPORATE SOURCE: Brooklyn College, City University of New York,

Brooklyn, NY, 11210, USA

SOURCE: Journal of Chemical and Engineering Data (

1996), 41(5), 1160-1167

CODEN: JCEAAX; ISSN: 0021-9568

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

The surface properties [effectiveness of surface tension reduction (γCMC) , critical micelle concentration (CMC), efficiency of surface tension reduction (pC20), maximum surface excess concentration (Γmax), min. area/mol. at the interface (Amin), and the (CMC/C20) ratio] of well-purified anionic, nonionic, and cationic surfactants, some of which are widely used in daily chemical and industrial products, were investigated at 25 °C in hard river water. The studied surfactants show somewhat greater surface activity in hard river water than in distilled water, but in particular, for anionic surfactants a marked effect of hard river water on surface active properties was observed The effect of hard river water on surface active properties is, in decreasing order, anionics > cationics > nonionics. For alkyl poly(oxyethylene glycol)s, the effect on surface properties is interpreted in terms of complex formation between the ether oxygen atoms of the poly(oxyethylene) group and divalent hardness ions. The linear relationship between the pC20 or CMC values and the number of carbon atoms in the alkyl chain observed in distilled water was confirmed in hard river water. For alkyl poly(oxyethylene sulfate)s, the slope of the plot indicates an effect of the alkyl chain on adsorption at the air/water interface or on micellization similar to that observed for nonionic surfactants in distilled water.

IT 3088-31-1, DiEthylene glycol monododecyl ether sulfate sodium salt 3694-74-4, Ethylene glycol monotetradecyl ether sulfate sodium salt 15826-16-1, Ethylene glycol monododecyl ether sulfate sodium salt 15826-19-4, Tetraethylene glycol monododecyl ether sodium sulfate 24895-01-0, Ethylene glycol monopentadecyl ether sulfate

sodium salt 26482-91-7, Diethylene glycol monotetradecyl ether sulfate sodium salt 148909-91-5, Tetraethylene glycol monotetradecyl ether sulfate sodium salt 181370-55-8

(effect of hard river water on the surface properties of surfactants)

RN 3088-31-1 HCAPLUS

CN Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 3694-74-4 HCAPLUS

CN Ethanol, 2-(tetradecyloxy)-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-OSO_3H}$

Na

RN 15826-16-1 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11}-O^{-CH_2}-CH_2-OSO_3H$

Na

RN 15826-19-4 HCAPLUS

CN 3,6,9,12-Tetraoxatetracosan-1-ol, hydrogen sulfate, sodium salt (6CI, 8CI, 9CI) (CA INDEX NAME)

 $\text{Me-} (\text{CH}_2)_{11} - \text{O-} \text{CH}_2 - \text{CH}_2 - \text{O-} \text{CH}_2 - \text{CH}_2$

Na

RN 24895-01-0 HCAPLUS

CN Ethanol, 2-(pentadecyloxy)-, hydrogen sulfate, sodium salt (8CI, 9CI) (CA INDEX NAME)

 $Me^- (CH_2)_{14} - O^- CH_2 - CH_2 - OSO_3H$

Na

RN 26482-91-7 HCAPLUS

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 148909-91-5 HCAPLUS

CN 3,6,9,12-Tetraoxahexacosan-1-ol, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\text{Me}^- \text{ (CH}_2)_{13} - \text{O}^- \text{CH}_2 - \text{CH}_2 - \text{OSO}_3 \text{H}$

Na

RN 181370-55-8 HCAPLUS

CN 3,6,9,12-Tetraoxaheptacosan-1-ol, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

Me- (CH2)14-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-OSO3H

Na

CC 46-3 (Surface Active Agents and Detergents)

Section cross-reference(s): 61, 68

ST cationic surfactant CMC hard river water; nonionic surfactant CMC hard river water; anionic surfactant CMC hard river water; surface property hard river water

IT Adsorption Micelles

(effect of hard river water on the surface properties of surfactants)

IT Surface area

(min.; effect of hard river water on the surface properties of surfactants)

IT Surfactants

(anionic, effect of hard river water on the surface properties of surfactants)

IT

Surfactants

```
(cationic, effect of hard river water on the surface properties
        of surfactants)
IT
     Surfactants
        (nonionic, effect of hard river water on the surface properties
        of surfactants)
ΙT
     151-21-3, Sodium dodecylsulfate, properties
                                                   577-11-7, Sodium
     bis(ethylhexyl) sulfosuccinate
                                      871-95-4,
     Dimethyldodecylphosphine oxide
                                      1119-94-4,
     Dodecyltrimethylammonium bromide
                                      1119-97-7,
     Tetradecyltrimethylammonium bromide
                                          1191-50-0, Sodium
     tetradecylsulfate 2082-84-0, Decyltrimethylammonium bromide
     2190-95-6, Dimethyldecylphosphine oxide
                                              2386-53-0, Sodium
     dodecylsulfonate 2534-65-8, N-Decylpyridinium bromide
     2687-94-7, N-Octylpyrrolidinone 2687-96-9, N-
     Dodecylpyrrolidinone 3088-31-1, DiEthylene glycol
     monododecyl ether sulfate sodium salt 3694-74-4,
     Ethylene glycol monotetradecyl ether sulfate sodium salt
     5157-04-0, Hexaethylene glycol tetradecyl ether 5168-89-8,
     Hexaethylene glycol decyl ether 5168-91-2, Hexaethylene glycol
     hexadecyl ether 5274-68-0, Tetraethylene glycol dodecyl ether
     13393-71-0, Sodium pentadecylsulfate 15826-16-1,
     Ethylene glycol monododecyl ether sulfate sodium salt
     15826-19-4, Tetraethylene glycol monododecyl ether sodium
     sulfate 24895-01-0, Ethylene glycol monopentadecyl ether
     sulfate sodium salt 26482-91-7, Diethylene glycol
     monotetradecyl ether sulfate sodium salt
                                                27847-86-5,
     Octaethylene glycol monotetradecyl ether 39034-24-7,
     Tetraethylene glycol tetradecyl ether 39516-24-0, Dodecane-1,3-
     diol
            55257-88-0 56029-36-8, Dimethylnonylphosphine
            66397-78-2, N-(2-Ethylhexyl)pyrrolidinone 70679-32-2,
     Potassium decylsulfonate 148909-91-5, Tetraethylene
     glycol monotetradecyl ether sulfate sodium salt
     181370-55-8
        (effect of hard river water on the surface properties of
        surfactants)
L40 ANSWER 21 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        1996:317077 HCAPLUS
DOCUMENT NUMBER:
                        125:42424
TITLE:
                        The interaction of some novel diquaternary
                        gemini surfactants with anionic
                        surfactants
                        Liu, Letian; Rosen, Milton J.
AUTHOR(S):
CORPORATE SOURCE:
                        Surfactant Res. Inst., CUNY, Brooklyn, NY,
                        11210, USA
                        Journal of Colloid and Interface Science (
SOURCE:
                        1996), 179(2), 454-459
                        CODEN: JCISA5; ISSN: 0021-9797
PUBLISHER:
                        Academic
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        English
    The interactins of a series of novel cationic gemini
     surfactants, [CnH2n+1 (CH3) 2N+CH2CHOHCHOHCH2 (CH3) 2N+CnH2n+1
    ]2 2Br- (symbolized (CnN)2), with conventional surfactants
     (containing a single hydrophilic and a single hydrophobic group in the
    mol.) were studied. (C8N)2 and (C10N)2 have very strong
    interactins with the anionic surfactants C10H21SO3Na,
    C12H25SO3Na, and C12H25(C2H4O)4SO4Na, producing marked
    synergism in surface tension reduction efficiency and effectiveness
```

and in mixed micelle formation in H2O, 0.1 M NaBr, and 0.1 M NaCl. In contrast, (C12N)2 shows no synergism at all with C12H25SO3Na and has a much weaker synergistic interaction with C12H25 (C2H4O) 4SO4Na. Extraordinarily strong interaction between the (C12N)2 and C12H25SO3Na produces small, sol ., nonmicellar aggregates (having no surface activity) that decrease the monomer concns. of the component surfactants , thereby reducing the surface activity of the system. Equilibrium constant calcns. for this aggregate formation indicate that the 2 surfactants are present in a 1:1 molar ratio. 15826-19-4, Sodium tetraethylene glycol dodecyl ether

sulfate

(cationic diquaternary gemini surfactant interactions with anionic surfactants and synergism in surface tension reduction and in mixed micelle formation)

RN15826-19-4 HCAPLUS

IT

3,6,9,12-Tetraoxatetracosan-1-ol, hydrogen sulfate, sodium salt CN (6CI, 8CI, 9CI) (CA INDEX NAME)

Me- (CH₂)₁₁-O-CH₂-CH₂-O-CH₂-CH₂-O-CH₂-CH₂-O-CH₂-CH₂-OSO₃H

Na

66-2 (Surface Chemistry and Colloids) Section cross-reference(s): 22, 46

mixed micelle diquaternary gemini anionic surfactant; ST surface tension cationic gemini anionic surfactant

IT Chains, chemical

Micelles

IT

Surface tension

Surfactants

(cationic diquaternary gemini surfactant interactions with anionic surfactants and synergism in surface tension reduction and in mixed micelle formation)

IT Quaternary ammonium compounds, properties

> (di-, bromides; cationic diquaternary gemini surfactant interactions with anionic surfactants and synergism in surface tension reduction and in mixed micelle formation)

142-87-0, Sodium decyl sulfate 151-21-3, SDS, properties

15826-19-4, Sodium tetraethylene glycol dodecyl ether 178061-56-8 178061-57-9 178061-58-0 sulfate

(cationic diquaternary gemini surfactant interactions with anionic surfactants and synergism in surface tension reduction and in mixed micelle formation)

L40 ANSWER 22 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:307744 HCAPLUS

DOCUMENT NUMBER: 124:320176

TITLE: Transparent personal cleansing bar

INVENTOR(S): Wiegand, Benjamin Carl; Figueroa, Alejandro;

Brunsman, Michael August; Zyngier, Alexandre

PATENT ASSIGNEE(S): Procter and Gamble Company, USA

PCT Int. Appl., 30 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PA	TENT	NO.			KIN		DATE		Al	PPL	ICAT	ION :	NO.		DA	TE
 WC	9604	- 361			A 1		1996	0215	W	0 1	995-	US94	37			
										_						95 26
	₩:	JP,	KG,	ΚP,	KR,	KZ,	, LK,	LR,	CN, CLT, I	CZ, LV,	EE, MD,	MG,	MN,	MX,		
	RW:	KE, IE,	MW, IT,	SD, LU,	SZ, MC,	UG NL	AT,	BE, SE,	CH, I BF, I	DE,	DK,	ES,	FR,	GB,		
CA	2196								C.	A 1	995-	2196	612			95 26
										<						
	2196						2001						_			
AU	9532	009			AI				JA			3200	9			95 26
EP	7751	95			A 1		1997	0528	EI		 995-	9281	44			
																95 26
	R:	AT, PT,		CH,	DE,	DK,	ES,	FR,	GB, C	-	IE,	IT,	LI,	LU,	NL,	
CN	1157	•			A		1997	0820	CI	1 1	995-	1950	85			95 26
										<					0,	20
JP	1050	4336			T2		1998	0428	JI	P 1	995-	5065	92			95
										<					0 /	26
BR	9508	501			A		1998	1103	BF	R 1:	995-	8501				95
										<					07	26
HU	7801	5			A2		1999	0528	н	J 1:	997-:	312			19 07	95 26
										<						
PRIORIT	Y APP	LN.	INFO	. :					US	3 1:	994-:	2852	51	j	A 19 08	94 03
													_		_	
									WC		995-1	JS94:	37	Ĭ		95 26
				_				_		<						

AB A monohydric alc.-free process for making transparent pour molded personal cleansing bars of good hardness comprises (I) making a molten mixture of 18-35 parts soap, wherein the soap ≥50% insol. Na soap; 14-32 parts H2O; 5-37 parts synthetic surfactant of critical micelle concentration equilibrium surface tension

10-50 dynes/cm; and 18-37 parts H2O-soluble organic solvent, wherein the combined level of H2O and H2O-soluble organic solvent within the molten mixture ≥40 parts; and (II) transferring the mixture to a mold, and (III) allowing the molded unit to cool in acquiescent conditions into a mild, low-smearing transparent personal cleansing bar. Bars made by the process are more weight stable than bars made with several parts of alc. Bar processing time is substantially reduced by faster crystallization and faster bar stabilization. A bar soap was made from babassu soap 10.5, hardened tallow soap 19.5, triple pressed fatty acid 0.5, propylene glycol 11.0, dipropylene glycol 5.5, glycerin 6.0, Na lauryl ethoxy sulfate 12.0, Na lauryl sulfate 3.0, coco betaine 2.0, NaCl 1.5, sugar 2.0, water 24.3, and other additives 2.2 parts.

RN 13150-00-0 HCAPLUS

 $Me^{-(CH_2)}_{11} = O^{-CH_2} = CH_2 = O^{-CH_2} = CH_2 = O^{-CH_2} = CH_2 = O^{-CH_2} =$

Na

IC ICM C11D017-00

ICS C11D010-04; C11D003-30; C11D003-20

46-2 (Surface Active Agents and Detergents)

ST soap bar transparent alc free; surfactant water glycol solvent bar soap

IT Sulfonic acids, uses

(alkylglyceryl ether ester; transparent personal cleansing bar containing water/solvent mixture, soap, and **surfactant** free of volatile alcs.)

IT Babassu palm

(soap from; transparent personal cleansing bar containing water/solvent mixture, soap, and surfactant free of volatile alcs.)

IT Surfactants

(transparent personal cleansing bar containing water/solvent mixture, soap, and surfactant free of volatile alcs.)

IT Soaps

(bars, transparent personal cleansing bar containing water/solvent mixture, soap, and surfactant free of volatile alcs.)

IT Fatty acids, uses

(coco, transparent personal cleansing bar containing water/solvent mixture, soap, and surfactant free of volatile alcs.)

IT Fatty acids, uses

(tallow, transparent personal cleansing bar containing water/solvent mixture, soap, and surfactant free of volatile alcs.)

IT 50-70-4, D-Glucitol, uses 56-81-5, 1,2,3-Propanetriol, uses
57-55-6, 1,2-Propanediol, uses 96-20-8, 2-Amino-1-butanol
102-71-6, uses 107-21-1, 1,2-Ethanediol, uses 111-42-2, uses
141-43-5, uses 151-21-3, Sodium lauryl sulfate, uses 629-30-1,
1,7-Heptanediol 7631-98-3, Sodium lauryl sarcosinate

13150-00-0, Sodium lauryl triethoxy sulfate 25265-71-8, Dipropylene glycol 25265-75-2, Butylene glycol 25322-68-3 26838-05-1

(transparent personal cleansing bar containing water/solvent mixture, soap, and surfactant free of volatile alcs.)

L40 ANSWER 23 OF 50 . HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1996:303961 HCAPLUS

DOCUMENT NUMBER:

124:320183

TITLE:

(Octyloxy) propanols for use in surfactant

manufacture

INVENTOR(S):

Schmid, Karl; Neus, Michael; Nitsche, Michael

PATENT ASSIGNEE(S):

Henkel KGaA, Germany Ger. Offen., 11 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4436066	A1	19960411	DE 1994-4436066	
22 1130000	***	19900111	BB 1331 1130000	1994 1010
WO 9611177	A1	19960418	< WO 1995-DE1356	
•				1995 1002
			<	•
W: CN, KR, US RW: AT, BE, CH, PT, SE	DE, DK	, ES, FR,	GB, GR, IE, IT, LU, MC, N	L,
EP 785918	A1	19970730	EP 1995-934041	1995 1002
R: DE, ES, FR,	IT		<	
PRIORITY APPLN. INFO.:			DE 1994-4436066 A	1994 1010
			<	
			WO 1995-DE1356 W	1995 1002

OTHER SOURCE(S): MARPAT 124:320183

The alcs. ROCH2CH(Me)OH (R = branched or normal C8 alkyl group), containing <5% free octanol and useful for ethoxylation and sulfation in surfactant manufacture, are prepared Heating 2 mol 1-octanol, 2-mol propylene oxide, and 4 g NaOMe at 140° for 30 min and vacuum distillation gave a nearly quant. yield of 1-(octyloxy)-2propanol (I) containing 0.9% free octanol. Sulfation and ethoxylation of I are exemplified.

IT 176660-46-1P 176660-48-3P

(manufacture of, for use in detergents)

RN 176660-46-1 HCAPLUS

2-Propanol, 1-(octyloxy)-, hydrogen sulfate, sodium salt (9CI) CN (CA INDEX NAME)

```
^{
m OSO_3H}_{
m |} Me-CH-CH_2-O-(CH_2)_7-Me
```

Na

RN 176660-48-3 HCAPLUS
CN Ethanol, 2-[2-[1-methyl-2-(octyloxy)ethoxy]ethoxy]-, hydrogen
sulfate, sodium salt (9CI) (CA INDEX NAME)

$$O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H$$

|
Me-CH-CH_2-O-(CH_2)_7-Me

Na

IC ICM C07C043-13 ICS C07C305-10; C07C303-24; C07C041-03; C11D001-722

CC 46-3 (Surface Active Agents and Detergents)

Section cross-reference(s): 23, 45

37311-02-7P, Polyethylene-polypropylene glycol monooctyl ether
176660-46-1P 176660-47-2P 176660-48-3P
(manufacture of, for use in detergents)

L40 ANSWER 24 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:171504 HCAPLUS

DOCUMENT NUMBER: 118:171504

TITLE: Ionic surfactants applicable in hard

water

AUTHOR(S): Shinoda, Kozo; Shibata, Yutaka

CORPORATE SOURCE: Fac. Eng., Yokohama Natl. Univ., Yokohama,

240, Japan

SOURCE: Yukagaku (1993), 42(2), 81-5

CODEN: YKGKAM; ISSN: 0513-398X

DOCUMENT TYPE: Journal LANGUAGE: Japanese

AB Based on the phys. meaning of Krafft point, anionic

surfactants with low Krafft points were

synthesized. The surfactants could be used in

hard water, brines, etc.

IT 14858-45-8P 14858-50-5P 14858-54-9P 14858-56-1P 15826-16-1P 41343-91-3P

63596-52-1P 72267-13-1P 72267-15-3P

74791-05-2P 74812-85-4P 94234-78-3P

100899-99-8P 100900-00-3P 100900-01-4P 100900-02-5P 100900-03-6P 100900-04-7P

116050-08-9P

(surfactants, preparation and Krafft point and critical micelle concentration of)

RN 14858-45-8 HCAPLUS

CN 2-Propanol, 1-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI)

(CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}$$
 $^{
m Me-}$ CH- CH₂-O- (CH₂)₁₁-Me

Na

RN 14858-50-5 HCAPLUS CN 2-Propanol, 1-(tetradecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$^{
m OSO_3H}$$
 | Me- CH- CH₂- O- (CH₂) $_{13}$ - Me

Na

RN 14858-54-9 HCAPLUS CN Ethanol, 2-(hexadecyloxy)-, hydrogen sulfate, sodium salt (6CI, 8CI, 9CI) (CA INDEX NAME)

$$Me^{-(CH_2)}_{15} - O^{-CH_2} - CH_2 - OSO_3H$$

Na

RN 14858-56-1 HCAPLUS CN 2-Propanol, 1-(hexadecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}_{
m Me-CH-CH_2-O-(CH_2)_{15}-Me}$$

• Na

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

Na

RN 41343-91-3 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

●1/2 Ca

RN 63596-52-1 HCAPLUS

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

●1/2 Mg

RN 72267-13-1 HCAPLUS

CN Ethanol, 2-(hexadecyloxy)-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{15}-O-CH_2-CH_2-OSO_3H}$

●1/2 Ca

RN 72267-15-3 HCAPLUS

CN Ethanol, 2-(hexadecyloxy)-, hydrogen sulfate, magnesium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{15}-O-CH_2-CH_2-OSO_3H}$

●1/2 Mg

RN 74791-05-2 HCAPLUS

CN Propanol, [2-[2-(dodecyloxy)methylethoxy]methylethoxy]-, hydrogen
sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

3 (D1-Me)

Na

RN 74812-85-4 HCAPLUS

CN Propanol, [2-[2-(hexadecyloxy)methylethoxy]methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\label{eq:memory_hermite} \text{Me-} \ (\text{CH}_2)_{15} - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{O-} \ \text{CH}_2 - \text{CH}_2 - \text{OSO}_3 \text{H}$

3 (D1-Me)

Na

RN 94234-78-3 HCAPLUS

CN Propanol, [2-[2-(hexadecyloxy)methylethoxy]methylethoxy]-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)

 ${\rm Me^-} \; ({\rm CH_2}) \; {\rm _{15}-o^-} \; {\rm CH_2^-} \; {\rm CH_2^-o^-} \; {\rm CH_$

3 (D1-Me)

●1/2 Ca

RN 100899-99-8 HCAPLUS

CN 2-Propanol, 1-(dodecyloxy)-, hydrogen sulfate, magnesium salt (9CI) (CA INDEX NAME)

OSO3H | Me-CH-CH2-O-(CH2)11-Me

●1/2 Mg

RN 100900-00-3 HCAPLUS

CN 2-Propanol, 1-(tetradecyloxy)-, hydrogen sulfate, magnesium salt (9CI) (CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}$$
 $^{
m Me-}$ CH- CH₂- O- (CH₂) $_{13}-$ Me

●1/2 Mg

RN 100900-01-4 HCAPLUS

CN 2-Propanol, 1-(hexadecyloxy)-, hydrogen sulfate, magnesium salt (9CI) (CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}_{
m Me-CH-CH_2-O-(CH_2)_{15}-Me}$$

●1/2 Mg

RN 100900-02-5 HCAPLUS

CN 2-Propanol, 1-(dodecyloxy)-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}$$
 Me- CH- CH₂- O- (CH₂) $_{11}^{-}$ Me

●1/2 Ca

RN 100900-03-6 HCAPLUS

CN 2-Propanol, 1-(tetradecyloxy)-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)

●1/2 Ca

RN 100900-04-7 HCAPLUS

OSO₃H $Me-CH-CH_2-O-(CH_2)_{15}-Me$

●1/2 Ca

RN 116050-08-9 HCAPLUS

CN Propanol, [2-[2-(dodecyloxy)methylethoxy]methylethoxy]-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

3 (D1-Me)

●1/2 Ca

CC 46-3 (Surface Active Agents and Detergents) ST anionic surfactant Krafft point IT Micelles (critical concentration of, of anionic surfactants) IT Krafft point (of anionic surfactants) IT Surfactants (anionic, preparation and Krafft point and critical micelle concentration of) IT 7647-14-5, Sodium chloride, uses (anionic surfactant solubility in aqueous decane containing) IT 151-21-3P, preparation (preparation and Krafft point and critical micelle concentration of) IT 1120-01-0P 1191-50-0P 3097-08-3P 4780-52-3P 14858-45-8P 14858-50-5P 14858-54-9P 14858-56-1P 15826-16-1P 17006-05-2P 17018-84-7P 17211-21-1P 25446-91-7P 41343-91-3P 63596-52-1P 72267-13-1P 72267-15-3P 74791-05-2P 74812-85-4P 94234-78-3P 100899-99-8P 100900-00-3P 100900-01-4P 100900-02-5P 100900-03-6P 100900-04-7P 116050-08-9P (surfactants, preparation and Krafft point and critical micelle concentration of) IT 25542-86-3 (surfactants, solubility of, sodium chloride concentration effect on) L40 ANSWER 25 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

118:8630

ACCESSION NUMBER: DOCUMENT NUMBER:

1993:8630 HCAPLUS

TITLE:

Syntheses and surface active properties of polyoxyethylene fatty alcohol ether sulfonates

AUTHOR (S):

Shi, Mingli, Ding, Zhaoyun, Wang, Zhongni Dep. Chem., Shandong Norm. Univ., Jinan,

250014, Peop. Rep. China

SOURCE:

AB

Gaodeng Xuexiao Huaxue Xuebao (1991

), 12(10), 1341-3

CODEN: KTHPDM; ISSN: 0251-0790

DOCUMENT TYPE:

CORPORATE SOURCE:

Journal Chinese

LANGUAGE:

Several polyoxyethylene alkyl ether Na sulfonates were prepared and characterized. The krafft point and critical micelle concentration of these compds. were determined The surfactant properties of triethylene glycol alkyl ether Na sulfonates were better than those of ethylene glycol or diethylene glycol alkyl ether Na sulfonates.

IT 3088-31-1P 13150-00-0P 14858-54-9P 15826-16-1P 25446-80-4P 43168-25-8P

(preparation and surfactant properties of)

RN 3088-31-1 HCAPLUS

CN Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11}^{-0} - CH_2^{-CH_2}^{-0} - CH_2^{-CH_2}^{-0} - CH_2^{-0} - CH_2^{-0}$

Na

RN 13150-00-0 HCAPLUS

CN Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 Me^{-} (CH₂)₁₁-O-CH₂-CH₂-O-CH₂-CH₂-O-CH₂-OSO₃H

Na

RN 14858-54-9 HCAPLUS

CN Ethanol, 2-(hexadecyloxy)-, hydrogen sulfate, sodium salt (6CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^- (CH_2)_{15} - O - CH_2 - CH_2 - OSO_3H$

Na

RN 15826-16-1 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME) $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

Na

25446-80-4 HCAPLUS RN

CN Ethanol, 2-[2-[2-(tetradecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN43168-25-8 HCAPLUS

CNEthanol, 2-[2-[2-(hexadecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (6CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{15}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-OSO_3H}$

Na .

CC 46-3 (Surface Active Agents and Detergents) IT 3088-31-1P 13150-00-0P 14858-54-9P . 15826-16-1P 25446-80-4P 43168-25-8P

(preparation and surfactant properties of)

L40 ANSWER 26 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1992:176523 HCAPLUS

DOCUMENT NUMBER:

116:176523

TITLE:

Octadienyl ether sulfates for use in

surfactants

INVENTOR(S):

Fabry, Bernd; Gruber, Bert Henkel K.-G.a.A., Germany

PATENT ASSIGNEE(S): SOURCE:

Ger. Offen., 5 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4020973	A1	19920102	DE 1990-4020973	1990 0630
WO 9200274	A1	19920109	< WO 1991-EP1163	1991

0622

<-

<--

W: JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
PRIORITY APPLN. INFO.: DE 1990-4020973

1990 0630

OTHER SOURCE(S): MARPAT 116:176523

AB Sulfates R10(CH2CHR2O)nSO3X (R1 = octadienyl; R2 = H, Me; n = 1-10; X = H, alkali metal, etc.), useful as **surfactants** having good **solubility** in cold water and good foaming properties, are **prepared** by sulfating compds.
R10(CH2CHR2O)nH (**prepared** by telomerization of butadiene with a glycol or oligoalkylene glycol) followed by neutralization and hydrolysis of the **product**.

IT 140448-62-0P 140448-64-2P 140448-65-3P (preparation of surface-active)

RN 140448-62-0 HCAPLUS

CN Ethanol, 2-(octadienyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 61894-65-3 CMF C10 H22 O5 S

 $Me^{-(CH_2)}7^{-O-CH_2-CH_2-OSO_3H}$

RN 140448-64-2 HCAPLUS

CN Ethanol, 2-[2-(octadienyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 140448-63-1 CMF C12 H26 O6 S

 $Me^{-(CH_2)}7^{-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

RN 140448-65-3 HCAPLUS

CN Ethanol, 2-[2-[2-(octadienyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 61894-68-6 CMF C14 H30 O7 S

 $Me^{-(CH_2)}7^{-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H$

IC ICM C07C305-10

ICS C11D001-29; B01F017-04; A61K007-075

CC 46-3 (Surface Active Agents and Detergents)

Section cross-reference(s): 23 SToctadienyl ether sulfate prepn surfactant; polyoxyalkylene octadienyl ether sulfate surfactant; polyoxyethylene octadienyl ether sulfate surfactant; glycol octadienyl ether sulfate surfactant; foaming surfactant octadienyl ether sulfate; soly surfactant octadienyl ether sulfate TT Surfactants (octadienyl ether sulfates, preparation of cold watersoluble, foaming) IT 140448-62-0P 140448-64-2P 140448-65-3P 140486-66-4P 140475-26-9P (preparation of surface-active) IT 7664-93-9DP, Sulfuric acid, esters with glycol and oligoalkylene glycol monooctadienyl ethers (preparation of surfact-active) L40 ANSWER 27 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1990:442810 HCAPLUS DOCUMENT NUMBER: 113:42810 The synthesis and surface activities of octyl TITLE: polyoxyethylene ether sulfates and pyridinium salt AUTHOR (S): Li, Xuegang; Zhao, Guoxi CORPORATE SOURCE: Dep. Chem., Beijing Univ., Beijing, Peop. Rep. China SOURCE: Riyong Huaxue Gongye (1989), (5), 208-11 CODEN: RHGOE8; ISSN: 1001-1803 DOCUMENT TYPE: Journal LANGUAGE: Chinese Octyl polyoxyethylene sulfates and pyridinium salts were prepared from homogeneous polyoxyethylene octyl ether by Williamson synthesis. Their 1:1 mixture had high surface activity and formed a clear solution at any concns. IT 67656-23-9P 118665-06-8P (preparation and surface activity of) RN67656-23-9 HCAPLUS Ethanol, 2-(octyloxy)-, hydrogen sulfate, sodium salt (9CI) CNINDEX NAME) $Me^{-(CH_2)_7-O-CH_2-CH_2-OSO_3H}$

Na

 $Me^{-(CH_2)}7^{-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H$

Na

CC 46-3 (Surface Active Agents and Detergents)
IT 67656-23-9P 118665-06-8P 128298-17-9P
(preparation and surface activity of)

L40 ANSWER 28 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:531260 HCAPLUS

DOCUMENT NUMBER: 109:131260

TITLE: Solubilities of salts and urea in

the concentrated solutions of mixed ionic

surfactants

AUTHOR(S): Tajima, Kazuo; Horiuchi, Teruo; Tanaka, Minako

CORPORATE SOURCE: Fac. Eng., Kanagawa Univ., Yokohama, Japan SOURCE: Yukagaku (1988), 37(7), 535-40

SOURCE: Yukagaku (1988), 37(7), 535-40 CODEN: YKGKAM; ISSN: 0513-398X

DOCUMENT TYPE: Journal LANGUAGE: Japanese

A study was made of the solubilities of NaSCN, Na2CO3, Na2SO4, and urea in mixed solns. of triethylene glycol dodecyl ether sulfate Na salt (I) and Na tetradecenesulfonate (II) at 20% concentration Solubility was measured at 25° by a visual method. A maximum in the solubility vs. mole fraction curve was found at a 2:1 I-II molar ratio for Na2CO3 and 1:1 I-II ratio for NaSCN, but was not observed for Na2SO4 or urea. The maximum solubilities of Na2CO3 and NaSCN were .apprx.87% and 30%, resp., of those observed when using pure water as the solvent at 25°. Na2CO3 solubility was also observed in mixed surfactant solns. of I with other surfactants. Thus, maximum solubility could be considered to take place when (1) at least poly(oxyethylene) alkyl ether sulfate is present as the surfactant in solution, and (2) the hydration of salt dissolved is weaker than that of the ionic polar groups (RSO3- or RSO4-), but stronger than that of the poly(oxyethylene) groups in the surfactant.

IT 13150-00-0, Triethylene glycol dodecyl ether sulfate
 sodium salt

(mixed aqueous solns. with sodium tetradecenesulfonate, solubilities of salts and urea in)

RN 13150-00-0 HCAPLUS

CN Ethanol, 2-[2-(dodecyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

Na

CC 46-3 (Surface Active Agents and Detergents)

ST salt soly anionic surfactant; urea

soly anionic mixed surfactant

IT Surfactants

(anionic, sulfates and sulfonates, solubility of salts and urea in concentrated aqueous solns. of)

IT 13150-00-0, Triethylene glycol dodecyl ether sulfate
 sodium salt

(mixed aqueous solns. with sodium tetradecenesulfonate, solubilities of salts and urea in)

```
IT
     29963-33-5, Sodium tetradecenesulfonate
        (mixed concentrated aqueous solns. with triethylene glycol dodecyl ether
        sulfate sodium salt, solubility of urea and salts in)
IT
     57-13-6, Urea, properties 497-19-8, Sodium carbonate, properties
     540-72-7, Sodium thiocyanate
                                   7757-82-6, Sodium sulfate,
     properties
        (solubility of, in concentrated aqueous mixed anionic
        surfactant solns.)
L40 ANSWER 29 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1988:516661 HCAPLUS
DOCUMENT NUMBER:
                         109:116661
TITLE:
                         Anionic surfactants between double metal
                         hydroxide layers
AUTHOR (S):
                         Kopka, H.; Beneke, K.; Lagaly, G.
CORPORATE SOURCE:
                         Inst. Anorg. Chem., Univ. Kiel, Kiel, D-2300,
                         Fed. Rep. Ger.
SOURCE:
                         Journal of Colloid and Interface Science (
                         1988), 123(2), 427-36
                         CODEN: JCISA5; ISSN: 0021-9797
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     Surfactant films between double metal hydroxide layers are prepared
     by exchanging interlayer anions of layered double metal hydroxides
     {M1-xIIMxIII(OH)2}x+xx-.zH2O. {Zn2Cr(OH)6}+(NO3-).2H2O is used as
     an example of this group of layered materials. The nitrate ions
     are exchanged by alkyl sulfate ions CncH2nc+1SO4- (nc = 6, 8, ...,
     18) and dodecyl glycol ether sulfate ions C12H25(OCH2CH2)mSO4- (m
     = 0, 1, 2, 4). In equilibrium with the surfactant solns., monolayers
     of surfactant ions are formed between the Zn Cr hydroxide layers.
     The chain axes are perpendicular to the hydroxide sheets
     [V1(90°) structure]. After being washed and dried, the
     materials contain surfactant monolayers with the chains tilted
     about 56° to the hydroxide sheet [V1(56°)
     structure]. These materials take up long-chain alkanols
     CnaH2na+10H (na = 6, 8, ..., 18) into the interlayer regions.
     Bilayers are formed consisting of surfactant ions and alkanol
     mols. For most combinations of nc and na, the distance between
     the hydroxide sheets is determined by pairs of sulfate ions and alkanol
     mols. that are perpendicular to the hydroxide sheets and shortened
     by 1, 2, or 3 kinks. At extreme differences between nc and na the
     pairs are tilted (56-60°), or other arrangements occur.
     Small organic mols. (water, some diols, N-Me formamide, DMSO) are
     intercalated with maintenance of the 56° chain orientation.
     In particular cases and if the alkyl chains are not too long, some
     guest mols. associate, forming larger clusters, and causing a
     considerable change in the monolayer structure.
ΙT
     70664-25-4P 82107-46-8P 86237-35-6P
        (monolayers of, formation of, between double zirconium chromium
        hydroxide layers)
RN .
     70664-25-4 HCAPLUS
CN
     Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, ion(1-) (9CI)
                                                                 (CA
     INDEX NAME)
Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-SO_3}
RN
     82107-46-8 HCAPLUS
CN
    Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, ion(1-)
```

(9CI) (CA INDEX NAME)

RN 86237-35-6 HCAPLUS

CN 3,6,9,12-Tetraoxatetracosan-1-ol, hydrogen sulfate, ion(1-) (9CI) (CA INDEX NAME)

PAGE 1-A

Me- (CH₂)₁₁-0-CH₂-CH₂-0-CH₂-CH₂-0-CH₂-CH₂-0-CH

PAGE 1-B

-- so₃ -

CC 66-4 (Surface Chemistry and Colloids)

IT 557-47-1P 70664-25-4P 82107-46-8P

86237-35-6P

(monolayers of, formation of, between double zirconium chromium hydroxide layers)

L40 ANSWER 30 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1987:614366 HCAPLUS

DOCUMENT NUMBER:

107:214366

TITLE:

Polyacrylamide gel electrophoresis of several

proteins in the presence of sodium

oligooxyethylene dodecyl ether sulfates or a

commercially available analog

AUTHOR (S):

Koide, Misao; Fukuda, Masahiro; Ohbu, Kazuo;

Watanabe, Yasushi; Hayashi, Yutaro; Takagi,

Toshio

CORPORATE SOURCE:

Appl. Res. Lab. II, Lion Corp., Tokyo, 132,

Japan

SOURCE:

Analytical Biochemistry (1987),

164(1), 150-5

CODEN: ANBCA2; ISSN: 0003-2697

DOCUMENT TYPE: LANGUAGE: Journal English

AB The behavior of water-soluble proteins and a typical membrane protein in polyacrylamide gel electrophoresis was studied in the presence of Na oligooxyethylene dodecyl ether sulfates with a defined number of oxyethylene units or a com. available analog with distribution and heterogeneity for the oxyethylene chain length and alkyl group, resp. It was concluded that: (1) most water-soluble proteins do not interact with the anionic surfactants as long as their oxyethylene chain lengths are sufficiently long; (2) with com. available surfactant binds exceptionally well to β-lactoglobulin without causing denaturation and subsequent dissociation; (3) such surfactants are expected to solubilize membrane proteins without causing denaturation as judged from the result with Na+, K+-ATPase and are promising as new solubilizing agents for membrane proteins which enable efficient electrophoretic anal. or

separation after the solubilization.

- IT 3088-31-1P, Sodium dioxyethylene dodecyl ether sulfate (preparation of, as detergent for PAGE of proteins)
- RN 3088-31-1 HCAPLUS
- CN Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11}-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-OSO_3H$

Na

CC 9-7 (Biochemical Methods)

Section cross-reference(s): 46

ST protein sepn PAGE surfactant; membrane protein sepn surfactant PAGE; gel electrophoresis protein surfactant; oxyethylene alkyl ether sulfate prepn

IT Cell membrane

(proteins of, separation of, by PAGE, sodium oligooxyethylene dodecyl ether sulfates and analogs as surfactants for)

IT Albumins, analysis

Hemoglobins

Ovalbumins

Proteins, analysis

(separation of, by PAGE, sodium oligooxyethylene dodecyl ether sulfates and analogs as surfactants for)

IT Surfactants

(anionic, sodium oligooxyethylene dodecyl ether sulfates and analogs, preparation of, for PAGE of proteins)

IT Electrophoresis and Ionophoresis

(gel, of proteins, on polyacrylamide, sodium oligooxyethylene dodecyl ether sulfates and analogs as surfactants for)

IT Lactoglobulins

 $(\beta$ -, separation of, by PAGE, sodium oligooxyethylene dodecyl ether sulfates and analogs as surfactants for)

TT 75-21-8DP, reaction products with alcs., sulfates, sodium salts 151-21-3DP, oxyethylene derivs. 151-21-3P, preparation 3088-31-1P, Sodium dioxyethylene dodecyl ether sulfate 111338-20-6P 111338-21-7P 111338-22-8P 111338-23-9P 111338-24-0P

(preparation of, as detergent for PAGE of proteins)

IT 3055-93-4 3055-94-5 3055-96-7 3055-98-9, Octaoxyethylene dodecyl ether 4536-30-5 4542-57-8, Dodecyl ether 5274-68-0, Tetraoxyethylene dodecyl ether

(reaction of, with sulfuric oxide reaction product
with dioxane)

IT 9002-08-8, Trypsinogen 9035-81-8, Trypsin inhibitor (separation of, by PAGE, sodium oligooxyethylene dodecyl ether sulfates and analogs as surfactants for)

IT 9000-83-3, ATPase

(sodium-potassium-dependent, separation of, by PAGE, sodium oligooxyethylene dodecyl ether sulfates and analogs as surfactants for)

L40 ANSWER 31 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:604466 HCAPLUS DOCUMENT NUMBER: 107:204466 Identification of hydrophobic metabolites TITLE: formed during biodegradation of alkyl ethoxylate and alkyl ethoxy sulfate surfactants by Pseudomonas sp. DES1 AUTHOR(S): Griffiths, E. Thomas; Hales, Stephen G.; Russell, Nicholas J.; White, Graham F. CORPORATE SOURCE: Dep. Biochem., Univ. Coll., Cardiff, CF1 1XL, UK SOURCE: Biotechnology and Applied Biochemistry (**1987**), 9(3), 217-29 CODEN: BABIEC; ISSN: 0885-4513 DOCUMENT TYPE: Journal LANGUAGE: English Mineralization of Na [1-14C] dodecyl triethoxysulfate (I) and its unsulfated counterpart triethylene glycol [1-14C]dodecyl ether (II) by a sewage isolate Pseudomonas DES1 were similar in terms of (1) conversion of radiolabel to 14CO2 (.apprx.75%) and (2) final distribution of radioactivity between water-soluble (.apprx.20%) and ether extractable (.apprx.5%) residues. Thin-layer chromatog. of ether exts. showed that primary degradation of I was complete in 2 h, with simultaneous production of large amts. of triethylene glycol dodecyl ether, triethylene glycol dodecyl ether (III). Extended incubation of I or II with lysates produced ≤20 radiolabeled, ether-extractable metabolites of which 8 predominated; however, no compound accumulated and the metabolites never accounted for >20% of the total label throughout incubations. By a combination of chemical modification, thin-layer chromatog., and cochromatog. with authentic radiolabeled stds., the main metabolites were identified as the oxidation product of III (3,6,9-trioxaheneicosanoic acid); diethylene glycol dodecyl ether and the corresponding acid 3,6-dioxaoctadecanoic acid; monoethylene glycol dodecyl ether and the corresponding acid 3-oxapentadecanoic acid; dodecanol and dodecanoic acid; and a group of metabolites not identified individually but shown to contain alkyl-glycol ether bonds and carbonyl groups, but no hydroxyl groups. Precursorproduct relationships among the various metabolites were absent but the presence of compds. containing alkyl chains and <3 glycol units confirmed the operation of an ether-cleavage system in the Pseudomonas. Detection of alc., aldehyde, and carboxyl groups also implied the presence of alc. and aldehyde dehydrogenase enzymes to facilitate interconversion. IT 13150-00-0 (biodegrdn. of, by Pseudomonas, hydrophobic metabolites from) RN 13150-00-0 HCAPLUS

Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, CN sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11}-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-OSO_3H$

Na

CC 60-1 (Waste Treatment and Disposal) Section cross-reference(s): 10, 46

ST alkyl ethoxylate hydrophobic metabolite wastewater; ethoxy alkyl sulfate metabolite wastewater; Pseudomonas surfactant biodegrdn metabolite wastewater

IT Surfactants

(biodegrdn. of, by Pseudomonas, hydrophobic metabolites from)

IT 13150-00-0

(biodegrdn. of, by Pseudomonas, hydrophobic metabolites from)

IT 112-53-8P, Dodecanol 143-07-7P, Dodecanoic acid, preparation 3055-93-4P, Diethylene glycol dodecyl ether 3055-94-5P, Triethylene glycoldodecyl ether 4536-30-5P 6064-75-1P 20858-23-5P 20858-24-6P

(formation of, in sodium dodecyl triethoxy sulfate degradation by Pseudomonas)

L40 ANSWER 32 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:579645 HCAPLUS

DOCUMENT NUMBER: 107:179645

TITLE: Minimizing cosolvent requirements for

microemulsion formed with binary surfactant

mixtures

AUTHOR(S): Lalanne-Cassou, C.; Carmona, I.; Fortney, L.;

Samii, A.; Schechter, R. S.; Wade, W. H.; Weerasooriya, U.; Weerasooriya, V.; Yiv, S.

CORPORATE SOURCE: Univ. Texas, Austin, TX, 78712, USA

SOURCE: Journal of Dispersion Science and Technology (

1987), 8(2), 137-56

CODEN: JDTEDS; ISSN: 0193-2691

DOCUMENT TYPE: Journal LANGUAGE: English

AB In enhanced petroleum recovery with microemulsions, alc. (cosolvent) requirements are lowered when a surfactant with a branched and short hydrophobic tail and a higher EtO content is used. An alternate procedure for producing alc.-free microemulsions can be obtained by varying the mole ratio of straight and mid-chain branched species.

IT 111051-90-2DP, sulfonate derivs., Na salts
 (surfactants, microemulsions containing, for petroleum recovery,
 cosolvent economizing in)

RN 111051-90-2 HCAPLUS

CN Ethanol, 2-(eicosyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{19}-O-CH_2-CH_2-OSO_3H}$

Na

CC 51-2 (Fossil Fuels, Derivatives, and Related Products)

IT 98-11-3DP, Benzenesulfonic acid, alkyl derivs. 9004-98-2DP,

Polyethylene glycol oleyl ether, sulfonate derivs.

111051-90-2DP, sulfonate derivs., Na salts

(surfactants, microemulsions containing, for petroleum recovery, cosolvent economizing in)

L40 ANSWER 33 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:226756 HCAPLUS

DOCUMENT NUMBER: 104:226756

TITLE: INVENTOR(S): Liquid cleansing compositions Maile, Robert Joseph, Jr.

PATENT ASSIGNEE(S):

Procter and Gamble Co., USA

SOURCE: Eur. Pat. Appl., 26 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

FAMILY ACC. NUM. COUNT:

English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 166608	A2	10060102	EP 1985-304540	
EF 100000	AZ	19800102	EL 1362-204340	1985 0626
			<	0626
EP 166608	A3	19890705		
R: AT, BE, CH,	DE, FR	R, IT, LI,	LU, NL, SE	
GB 2160888			GB 1985-16174	
				1985
•				0626
			<	
GB 2160888	В2	19871223		
AU 8544237	A1	19860102	AU 1985-44237	
				1985
				0627
		•	<	002,
AU 583830	B2	19890511		
			CA 1985-485463	
CR 1242550	A.		CA 1303 403403	1985
•				0627
			<	0027
JP 61081496	A2	19860425	JP 1985-142403	
OF 01001490	A2	19000423	OF 1905-142405	1985
				0628
				0020
US 4917823	Α	19900417	< US 1988-277463	
05 491/823	A	1990041/	US 1988-277463	1000
				1988
		•		1123
			<	
PRIORITY APPLN. INFO.:			US 1984-625407 A	
				1984
				0628
			<	
			US 1986-921905 B	1
				1986
				1024
			<	

A liquid cleansing composition comprises a water-soluble cellulose polymer 0.1-01.5, a glycol solvent 0.5-20, a synthetic surfactant 10-50, an electrolyte 0.001-1.0, and water 50-80%, having a neat viscosity 2000-12,000 cP and a dilute viscosity (50%) of 15-95 cP. Thus 28.5% sodium lauryl ethoxylate sulfate 39.3, 28.5% Na lauryl sulfate 32.2, coconut monoethanolamide 4.0, perfume 3, ethylene glycol distearate, EDTA 0.1, preservatives 0.25, color solution 0.8, citric acid 0.25, NaCl 0.1, Jaguar HP-60 0.55, propylene glycol 9%, and the balance distilled water were mixed and evaluated as a liquid cleansing composition The product, unlike others containing cellulose polymers,

was phase-stable.

IT 15826-16-1

(liquid cleaning compns. containing, with low electrolyte level)

RN 15826-16-1 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

Na

IC ICM C11D003-37

CC 46-6 (Surface Active Agents and Detergents)

IT Detergents

(cleaning compns., liquid, containing water-soluble cellulose derivative and glycol solvent, with low electrolyte level)

IT 57-55-6, uses and miscellaneous 107-21-1, uses and miscellaneous 137-16-6 151-21-3, uses and miscellaneous 627-83-8 9004-32-4 9004-62-0 9004-64-2 9041-56-9 14807-96-6, uses and miscellaneous 15826-16-1 25322-68-3 25322-69-4 37353-59-6

(liquid cleaning compns. containing, with low electrolyte level)

L40 ANSWER 34 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1984:532891 HCAPLUS

DOCUMENT NUMBER:

101:132891

TITLE:

Cosmetic agent from quaternary chitosan derivatives and new quaternary chitosan

derivatives

INVENTOR(S):

Lang, Guenther; Wendel, Harald; Konrad, Eugen

PATENT ASSIGNEE(S):

Wella A.-G., Fed. Rep. Ger. Ger. Offen., 40 pp.

Ger. Often., 40 pp CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3245784	A1	19840614	DE 1982-3245784	1982 1210
WO 8402343	A1	19840621	< WO 1983-EP287	1983 1103
W: AU, BR, JP,	IIC		<	1103
AU 8322675	A1	19840705	AU 1983-22675	1983 1103
AU 561477 EP 115574	B2 A1	19870507 19840815	< EP 1983-110950	

						1983 1103
_				<		1103
EP 115574	B 1	19870128		\		
R: AT, DE, FR						
BR 8307642	, GB, A	19841127	ВD	1983-7642		
BR 8307042	Α.	17041127	DIC	1703-7042		1983
						1103
				.		1103
JP 60500059	Т2	19850117		< 1983-503779		
JP 60300039	12	13020111	UP	1903-303779		1983
						1103
				<		
JP 06027121	B4					
AT 25261	E	19870215	AT	1983-110950		
						1983
						1103
•				<		
US 4822598	Α	19890418	US	1984-634100		
						1984
						0720
				<		
US 4921949	Α	19900501	US	1989-298514		
						1989
•						0308
				<		
PRIORITY APPLN. INFO.:			DE	1982-3245784	Α	
						1982
						1210
				<		
			EP	1983-110950	Α	
						1983
						1103
				<		
			WO	1983-EP287	Α	
•						1983
						1103
				<		
			US	1984-634100	А3	
				•		1984
						0720
				<		

AB Etherification of chitosan (I) with glycidyltrimethylammonium chloride (II) as well as glycidol (III) gave the corresponding quaternized I for use as a hair conditioner. Thus, a mixture of I 100, II 80.6, and III 79.5 g in 1 l. H20 was stirred for 48 h at 30°, treated with 25.8 g II and 26.3 g III and stirred for 24 h at 40° to give 115 g 2,3-dihydroxypropyl 2-hydroxy-3-(trimethylammonio)propyl chitosan chloride (IV) [92091-36-6] with limiting viscosity number 65 mL/g, titratable N 3.07 mmol/g, Cl- 2.35%, substitution degree 0.22 and 1.7 for cationic and dihydroxypropyl groups, resp., H2O vapor absorption 11.1%, and Koenig pendulum hardness 201 s. A mixture containing IV 0.6, H2O 73.8, iso-PrOH 25.0, 10% HCO2H 0.4, and perfume oil 0.2 g showed good hair fixing effect.

IT 3088-31-1P

(hair prepns. containing quaternized chitosan derivative, additives and, manufacture of)

RN 3088-31-1 HCAPLUS

CN Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt

(7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

IC C08B037-08; A61K007-00; C11D003-37; A61K007-48; A61K007-02; A61K007-40; A61K007-08; A61K007-11; A61K007-13

CC 44-7 (Industrial Carbohydrates)
 Section cross-reference(s): 62

IT 50-21-5P, uses and miscellaneous 68-11-1P, uses and miscellaneous 104-74-5P 106-50-3P, uses and miscellaneous 108-46-3P, uses and miscellaneous 112-02-7P 112-92-5P 120-47-8P 1066-33-7P 3088-31-1P 6179-44-8P 9004-65-3P 9005-66-7P 36653-82-4P 56216-28-5P

(hair prepns. containing quaternized chitosan derivative, additives and, manufacture of)

L40 ANSWER 35 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1982:201624 HCAPLUS

DOCUMENT NUMBER: 96:201624

TITLE: Complex compounds of bromine with surfactants

INVENTOR(S): Klopotek, Alojzy

PATENT ASSIGNEE(S): Instytut Chemii Przemyslowej, Pol.

SOURCE: Pol., 13 pp.
CODEN: POXXA7

DOCUMENT TYPE: Patent LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 110778	В2	19800731	PL 1977-201277	1977
PRIORITY APPLN. INFO.	:		< PL 1977-201277 A	1004
				1977 1004

AB Complexes of Br with OH-containing surfactants having good washing and disinfectant properties, are prepared by treating OH-containing surfactants at ≤323K with Br3- obtained in the reaction of liquid Br with saturated aqueous solution of KBr or NaBr. The OH-containing surfactants used are oxyethylated or oxypropylated fatty alcs., oxyethylated or oxypropylated N-hydroxyethylamides of fatty acids, phosphates of oxyethylated or oxypropylated fatty alcs., monoethanolamine salts of the phosphates, sulfates of oxyethylated or oxypropylated quaternary ammonium chlorides or bromides, and ethylene oxide-propylene oxide copolymers. Thus, 9.63 kg KBr in 26.76 kg water was treated at ≤323K with 6.47 kg liquid Br giving a solution of KBr3 which was gradually added to a reactor containing 57.14 kg polyethylene glycol mono-n-dodecyl ether. The resulting

```
exothermic reaction (the temperature was maintained at 303-13K by
     cooling) gave a complex of structure Me(CH2)11(OCH2CH2)nOH.
     ··BrBr···HO (CH2CH2O) n (CH2) 11Me
     demonstrated by chemical and NMR spectral data. The complex decomposed
     at >318K, and was deactivated and discolored by HCO2H and Na2S2O3.
IT
     40777-24-0DP, bromine complexes
        (detergent and disinfectant, preparation, properties and structure
        of)
RN
     40777-24-0 HCAPLUS
     3,6,9,12-Tetraoxatetracosan-1-ol, hydrogen sulfate (9CI)
CN
     INDEX NAME)
Me- (CH<sub>2</sub>)<sub>11</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-OSO<sub>3</sub>H
     C07C031-18
IC
CC
     46-3 (Surface Active Agents and Detergents)
     Section cross-reference(s): 63
     111-76-2DP, bromine complexes
                                       141-43-5DP, complexes with bromine
     and polyethylene glycol mono dodecyl ether phosphate
     3055-94-5DP, bromine complexes
                                        9003-11-6DP, bromine complexes
     9004-99-3DP, bromine complexes
                                        9038-43-1DP, bromine complexes
     25852-45-3DP, bromine complexes 40777-24-0DP, bromine
                41572-20-7DP, bromine complexes
                                                      52598-24-0DP,
                         81772-08-9DP, bromine complexes
     bromine complexes
        (detergent and disinfectant, preparation, properties and structure
L40 ANSWER 36 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
                          1980:570035 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          93:170035
TITLE:
                          Studies on the optimum solubilization
                          conditions for surfactant
                          -cosurfactant mixtures
AUTHOR (S):
                          Hanrin, Munehiro; Shinoda, Kozo; Hirai,
                          Tsuyoshi
CORPORATE SOURCE:
                          Fac. Eng., Yokohama Natl. Univ., Yokohama,
                          156, Japan
SOURCE:
                          Yukagaku (1980), 29(8), 580-6
                          CODEN: YKGKAM; ISSN: 0513-398X
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          Japanese
     The solubilization of hydrocarbons in aqueous solns. of
     surfactant-cosurfactant mixts. is examined to determination the
     influence of counter ions on the solubilization and the
     effects of changing the oxyethylene chain length in the ionic
     surfactants, i.e., Ca, Mg, or Na salts of
     C12H250(CH2CH20)nS03H (I) (n = 0, 1, or 2), and in the
     cosurfactants, i.e., C8H170(CH2CH20)nH (II) (n = 1, 2, or 3).
     the preparation of an emulsion of cyclohexane, the
     solubilizing power of a mixture of the Ca or Mg salt of I (n
     = 1 or 2) and II (n = 1-3) is 6-8 times greater than that of the
     mixts. of the Na salt of I (n = 1 \text{ or } 2) and II (n = 1-3).
     addition of 2% NaCl to aqueous solns. of I (n = 1) Na salt
     15826-16-1] and II (n = 2)
                                 [19327-37-8] increases the
     solubilizing power by a factor of 6. In systems containing I
     without II, the oxyethylene chain in the I increases their
     solubilizing power but may decrease the
```

solubilizing power of I-II mixts. and change the optimum

mixing ratio. The optimum mixing ratio of the solubilizers varies with the value of n in the II. The concentration of the I-II mixts. in the aqueous solns. also affects their solubilizing power. The I-II mixts. are especially useful for solubilizing long-chain alkanes, e.g., the use of II (n = 2) with I (n = 1) Ca salt [41343-91-3] increases the solubilization of dodecane by a factor of .apprx.20.

IT 3088-31-1 15826-16-1 41343-91-3 60484-04-0 63596-52-1

(emulsification of hydrocarbons by mixts. of nonionic surfactants and)

RN 3088-31-1 HCAPLUS

CN Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 15826-16-1 HCAPLUS CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

Na

RN 41343-91-3 HCAPLUS
CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, calcium salt (9CI)
(CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

●1/2 Ca

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

●1/2 Mg

RN 63596-52-1 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, magnesium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

●1/2 Mg

CC 46-1 (Surface Active Agents and Detergents)
ST solubilization hydrocarbon anionic nonionic
surfactant; sulfate ethoxylate solubilization
hydrocarbon; polyoxyethylene deriv solubilization
hydrocarbon; emulsification anionic nonionic surfactant
mixt

IT Optimization

(of emulsification of hydrocarbons by mixts. of anionic and nonionic surfactants)

IT 10020-43-6 19327-37-8 19327-38-9

(emulsification of hydrocarbons by mixts. of anionic surfactants and)

IT 151-21-3, uses and miscellaneous 3088-31-1

15826-16-1 41343-91-3 60484-04-0

63596-52-1

(emulsification of hydrocarbons by mixts. of nonionic surfactants and)

L40 ANSWER 37 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1980:516322 HCAPLUS

DOCUMENT NUMBER:

93:116322

TITLE:

Synthesis and surface activity of

sodium polyoxypropylated higher alcohol

sulfates

AUTHOR (S):

Chlebicki, Jan; Slipko, Kazimiera

CORPORATE SOURCE:

Inst. Org. Polym. Technol., Tech. Univ.

Wroclaw, Wroclaw, 50-370, Pol.

SOURCE:

Tenside Detergents (1980), 17(3),

130-4

CODEN: TSDTAZ; ISSN: 0040-3490

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Propoxylated C8-18 alcs. (d.p. 1-6) were distilled to >99% purity and treated with ClSO3H to give water-soluble sulfates. The surface tensions of the sulfates increase, and the critical micelle concns. decrease, with increasing alc. chain length. Those prepared for C12 and C14 alcs. have the best foaming power. The calculated CH2 unit equivalent is .apprx.1.40 oxypropylene units in the sulfates.

IT 74790-94-6 74790-95-7 74790-96-8 74790-97-9 74790-98-0 74790-99-1

74791-00-7 74791-01-8 74791-02-9

74791-03-0 74791-04-1 74791-05-2

74791-06-3 74791-07-4 74791-08-5

74791-09-6 74791-10-9 74797-45-8

74797-46-9 74812-83-2 74812-84-3

74812-85-4 74812-86-5 74812-87-6

74812-88-7 74812-89-8

(surface activity of)

RN 74790-94-6 HCAPLUS

CN Propanol, [methyl-2-(octyloxy)ethoxy]-, hydrogen sulfate, sodium
 salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}7^{-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

2 (D1-Me)

Na

RN 74790-95-7 HCAPLUS

CN Propanol, [methyl-2-[methyl-2-(octyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_7-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

3 (D1-Me)

Na

RN 74790-96-8 HCAPLUS

CN 3,6,9,12-Tetraoxaeicosan-1-ol, tetramethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

Me- (CH2) 7-0-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-OSO3H

4 (D1-Me)

Na

RN 74790-97-9 HCAPLUS

CN 3,6,9,12,15,18-Hexaoxahexacosan-1-ol, hexamethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

 $\text{Me}^- \text{ (CH$_2$) } _7 - \text{O}^- \text{ CH$_2$^- CH$_2$^- O}^- \text{ CH$_2$^- CH$_2$^- CH$_2$^- CH$_2$^- O}^- \text{ CH$_2$^- CH$_2$^- CH$_2$^- CH$_2$^- CH$_2$^- CH$_2$^- CH$_2$^- C$

6 (D1-Me)

Na

PAGE 1-B

- сн₂- сн₂- о- сн₂- сн₂- оsо₃н

RN 74790-98-0 HCAPLUS

CN Propanol, (decyloxy) -, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_9-O-CH_2-CH_2-OSO_3H}$

D1-Me

Na

RN 74790-99-1 HCAPLUS

CN Propanol, [2-(decyloxy)methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_9-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

2 (D1-Me)

Na

RN 74791-00-7 HCAPLUS

CN Propanol, [2-[2-(decyloxy)methylethoxy]methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_9-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

3 (D1-Me)

Na

RN 74791-01-8 HCAPLUS

CN 3,6,9,12-Tetraoxadocosan-1-ol, tetramethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)} = O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - O^{-CH_2} - O^{-CH_2}$

4 (D1-Me)

Na

RN 74791-02-9 HCAPLUS

CN 3,6,9,12,15-Pentaoxapentacosan-1-ol, pentamethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

 Me^{-} (CH₂) 9^{-} O $^{-}$ CH₂ $^{-}$ CH₂ $^{-}$ O $^{-}$

5 (D1-Me)

Na

PAGE 1-B

- CH₂- CH₂- OSO₃H

RN 74791-03-0 HCAPLUS

CN Propanol, (dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^- (CH_2)_{11} - O^- CH_2 - CH_2 - OSO_3H$

D1-Me

Na

RN 74791-04-1 HCAPLUS

CN Propanol, [2-(dodecyloxy)methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

2 (D1-Me)

Na

RN 74791-05-2 HCAPLUS

CN Propanol, [2-[2-(dodecyloxy)methylethoxy]methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11}-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-OSO_3H$

3 (D1-Me)

Na

RN 74791-06-3 HCAPLUS

CN 3,6,9,12-Tetraoxatetracosan-1-ol, tetramethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\text{Me}^{-} \text{ (CH}_2)_{11} - \text{O}^{-} \text{CH}_2 - \text{CH}_2 - \text{O}^{-} \text$

4 (D1-Me)

Na

RN 74791-07-4 HCAPLUS

CN Propanol, (tetradecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\text{Me}^- (\text{CH}_2)_{13} - \text{O}^- \text{CH}_2 - \text{CH}_2 - \text{OSO}_3 \text{H}$

D1-Me

Na

RN 74791-08-5 HCAPLUS

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

. 2 (D1-Me)

Na

RN 74791-09-6 HCAPLUS

CN Propanol, [methyl-2-[methyl-2-(tetradecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

3 (D1-Me)

Na

RN 74791-10-9 HCAPLUS

CN 3,6,9,12-Tetraoxahexacosan-1-ol, tetramethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\text{Me-} (\text{CH}_2)_{13} - \text{O-} \text{CH}_2 - \text{CH}_2 - \text{OSO}_3 \text{H}$

4 (D1-Me)

Na

RN 74797-45-8 HCAPLUS

CN Propanol, (octyloxy) -, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 H_3C^- (CH₂)₇-O-CH₂-CH₂-OSO₃H

D1-CH3

Na

RN 74797-46-9 HCAPLUS

CN 3,6,9,12,15-Pentaoxahexacosan-1-ol, pentamethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

5 D1-CH3

Na

PAGE 1-B

- CH₂- CH₂- OSO₃H

RN 74812-83-2 HCAPLUS

CN Propanol, (hexadecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{15}-O-CH_2-CH_2-OSO_3H}$

D1-Me

Na

RN 74812-84-3 HCAPLUS

CN Propanol, [2-(hexadecyloxy)methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{15} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - CH_2 - OSO_3H$

2 (D1-Me)

Na

RN 74812-85-4 HCAPLUS

CN Propanol, [2-[2-(hexadecyloxy)methylethoxy]methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{15}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

3 (D1-Me)

Na

RN 74812-86-5 HCAPLUS

CN 3,6,9,12-Tetraoxaoctacosan-1-ol, tetramethyl-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{15} - O^{-CH_2}_{-CH_2} - O^{-CH_2}_{-CH_2} - O^{-CH_2}_{-CH_2} - O^{-CH_2}_{-CH_2} - O^{-CH_2}_{-CH_2} - O^{-CH_2}_{-CH_2}$

4 (D1-Me)

Na

RN 74812-87-6 HCAPLUS

CN Propanol, (octadecyloxy) -, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{17}-O-CH_2-CH_2-OSO_3H}$

D1-Me

Na

RN 74812-88-7 HCAPLUS

CN Propanol, [methyl-2-(octadecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{17}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

2 (D1-Me)

Na

RN 74812-89-8 HCAPLUS

CN Propanol, [methyl-2-[methyl-2-(octadecyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{17} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

3 (D1-Me)

Na

CC 46-3 (Surface Active Agents and Detergents) stpropoxylate sulfate surfactant; micellization propoxylate sulfate; alc propoxylated sulfate surfactant ; polypropylene glycol ether sulfate IT Surfactants (anionic, sulfates of propoxylated fatty alcs., prepn . and properties of) IT 74790-81-1P (preparation and sulfation of) IT 29387-89-1P 52871-05-3P 58231-93-9P 63103-90-2P 74790-72-0P 74790-73-1P 74790-74-2P 74790-75-3P 74790-76-4P 74790-77-5P 74790-78-6P 74790-79-7P 74790-80-0P 74790-82-2P 74790-83-3P 74790-84-4P 74790-85-5P 74790-86-6P 74790-87-7P 74790-88-8P 74790-89-9P 74790-90-2P 74790-92-4P 74790-93-5P 74797-44-7P (preparation of) 74790-94-6 74790-95-7 74790-96-8 IT74790-97-9 74790-98-0 74790-99-1 74791-00-7 74791-01-8 74791-02-9 74791-03-0 74791-04-1 74791-05-2 74791-06-3 74791-07-4 74791-08-5 74791-09-6 74791-10-9 74797-45-8 74797-46-9 74812-83-2 74812-84-3 74812-85-4 74812-86-5 74812-87-6 74812-88-7 74812-89-8 (surface activity of)

L40 ANSWER 38 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1979:206276 HCAPLUS

DOCUMENT NUMBER:

90:206276

TITLE:

Aqueous cleaning agent solutions

INVENTOR(S):

Beck, Rudolf; Gasber, Willi

PATENT ASSIGNEE(S): SOURCE:

Chemische Werke Huels A.-G., Fed. Rep. Ger.

Ger. Offen., 19 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				,	
	DE 2743607	A1	19790405	DE 1977-2743607	
					1977
					0928
				<	
	DE 2743607	C2	19880714		
	FR 2404671	A1	19790427	FR 1978-26092	1070
					1978
					0912
	ED 2404671	В1	10020022	<	
	FR 2404671 CH 637690	A A	19830923 19830815	CH 1978-9984	
	CH 63/690	A	13030013	CH 1976-9964	1978
					0925
				<	0925
	SE 7810097	Α	19790329	SE 1978-10097	
	SE 7610057	А	19790329	SE 1978-10097	1978
					0926
				< ·	0320
	BE 870802	A1	19790327	BE 1978-190742	
	22 3,0002			22 13/0 130/12	1978
					0927
				<	
	DK 7804281	A	19790329	DK 1978-4281	
					1978
					0927
			•	<	
	NL 7809778	Α	19790330	NL 1978-9778	
					1978
					0927
	•			<	
	GB 2006255	Α	19790502	GB 1978-38280	
					1978
		•			0927
				<	
	GB 2006255	B2	19820303		
PRIOR	RITY APPLN. INFO.:			DE 1977-2743607 A	
					1977
				•	0928
				/	

AB The Na and K salts of ROCH2CH2OSO3H (I) with R = C3-7 alkyl are used as solubilizers and wetting agents in the manufacture of stable aqueous cleaning compns. containing high concns. of electrolytes (e.g., NaOH or K4P2O7) and surfactants. Thus, a stable cleaning composition was prepared from alkylbenzenesulfonate 1, I (R = Bu) 7.5, NaOH 20, and water 71.5%.

⁹²⁷⁻⁹⁶⁻⁸D, alkali salts 70396-82-6D, alkali IT

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salts
```

(solubilizers, for aqueous cleaning compns.)

RN 927-96-8 HCAPLUS

CN Ethanol, 2-butoxy-, hydrogen sulfate (7CI, 8CI, 9CI) (CA INDEX NAME)

 $n-BuO-CH_2-CH_2-OSO_3H$

RN 70396-82-6 HCAPLUS

CN Ethanol, 2-(hexyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{5} = O^{-CH_2} - CH_2 - OSO_3H$

IC C11D001-14

CC 46-6 (Surface Active Agents and Detergents)

ST sulfate alkyl glycol solubilizer; cleaner liq solubilizer

IT Detergents

(cleaning compns., aqueous, solubilizers for)

IT Solubilizers

(hydrotropes, alkyl glycol sulfates, for aqueous cleaning compns.)

IT 927-96-8D, alkali salts 70396-82-6D, alkali

salts

(solubilizers, for aqueous cleaning compns.)

L40 ANSWER 39 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1979:56740 HCAPLUS

DOCUMENT NUMBER:

90:56740

TITLE:

Chloroiodide complex compounds with

surfactants

INVENTOR(S):

Uminski, Jerzy; Klopotek, Alojzy; Dziala,

Gabriela; Jakubowska, Wieslawa

PATENT ASSIGNEE(S):

Instytut Chemii Przemyslowej, Pol.
Pol., 6 pp.

SOURCE:

CODEN: POXXA7

DOCUMENT TYPE:

Patent

LANGUAGE:

Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PL 88777		P	19760930	PL 1974-171018	
					1974
					0513
				<	
PRIORITY APPLN.	INFO.:			PL 1974-171018 A	
•					1974
					0513

AB Chloroiodination of nonionic [e.g. α -hydro- ω -octyloxy-tris(oxyethylene) (I) [19327-38-9]] or ionic [e.g. α -hydro-tris(oxyethylene) lauryl sulfate (II) [14960-11-3]] detergents with NaICl2 or ICl is claimed to give products not only with good detergency, but also

with bactericidal properties. E.g., a solution containing 0.1 kg NaICl2 in 0.3 L water was reacted with 0.75 kg I at <75°. The product was completely soluble The solution was treated with 0.2 kg H3PO4 and 0.01 kg dodecylbenzenesulfonic acid [27176-87-0] to give liquid detergent concentrate for washing food industry equipment. Similarly II, oxyethylated nonylphenol, and α -hydrotris(oxyethylene) lauryl Na phosphate [68935-84-2] were chloroiodinated.

IT 14960-11-3

(chloroiodination of, in production of bactericidal detergents)

RN 14960-11-3 HCAPLUS

CN Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]ethoxy]-, hydrogen sulfate
 (8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

IC C07C031-18

CC 46-3 (Surface Active Agents and Detergents)

IT Detergents

(bactericidal, chloroiodinated ionic or nonionic surfactants)

IT Iodination

(chloro-, of ionic or nonionic surfactants)

IT Chlorination

(iodo-, of ionic or nonionic surfactants)

IT 27176-87-0

(bactericidal detergents, containing chloroiodinated ionic or nonionic surfactants)

L40 ANSWER 40 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1978:508136 HCAPLUS

DOCUMENT NUMBER:

89:108136

TITLE:

1-Methoxyalkyl-2-sulfate useful in washing and

cleaning compositions

INVENTOR(S):

Bischoff, Martin; Baumann, Horst; Andree,

Hans; Sung, Eric

PATENT ASSIGNEE(S):

Henkel K.-G.a.A., Fed. Rep. Ger.

SOURCE:

Ger. Offen., 16 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:
FAMILY ACC. NUM. COUNT:

. 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2651925	A1	19780518	DE 1976-2651925	1976 1113
DE 2651925 PRIORITY APPLN. INFO.:	C2	19870129	< DE 1976-2651925 A	1976

1113

AB MeoCH2CHROSO3M (M = Na, K, NH4, quaternary ammonium cation; R = C8-20 alkyl), useful as detergents, were prepared by 2 methods. Thus, e.g., NaOMe in MeOH was treated with a C15 -18 1,2-epoxyalkane mixture and the mixture refluxed 8 h to give 80% the corresponding 1-methoxy-2-alkanols, which were sulfated with 3% S03 in an air stream at 22° 33 min or treated with ClSO3H at 12-21° to give 92 or 96% 1-methoxy-2-alkanol sulfates, isolated as the Na salts. The results of Launderometer washing tests showed 76-80% removal of dust and skin oils from soiled wool by the preparation Na 1-methoxy-2-alkanol sulfates vs. 0-71% for comparison samples.

IT 59679-94-6P

(preparation and detergent activity of)

RN 59679-94-6 HCAPLUS

CN 2-Hexadecanol, 1-methoxy-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

Na

IT 67217-02-1P 67217-03-2P

(preparation of)

RN 67217-02-1 HCAPLUS

CN 2-Tetradecanol, 1-methoxy-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}_{
m MeO-CH_2-CH-(CH_2)_{11}-Me}$$

Na

RN 67217-03-2 HCAPLUS

CN 2-Dodecanol, 1-methoxy-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

Na

IC C07C141-04

CC 23-9 (Aliphatic Compounds)
 Section cross-reference(s): 46

IT 59679-94-6P

(preparation and detergent activity of)

IT 67217-02-1P 67217-03-2P (preparation of)

L40 ANSWER 41 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1978:136132 HCAPLUS

DOCUMENT NUMBER:

88:136132

TITLE:

Neutralization of mixtures of organic sulfuric acids or sulfonic acids and excess sulfating

agent, resulting in sodium sulfate

INVENTOR(S):

Sagel, John A.; Barton, Brandon Harris

PATENT ASSIGNEE(S):

Procter and Gamble Co., USA

SOURCE:

Ger. Offen., 34 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DE 2729036 A1 19780112 DE 1977-2729036 1977 0628 US 4430271 A 19840207 US 1976-701729 1976 0701 CA 1104582 A1 19810707 CA 1977-281123 1977 0622 ES 460237 A1 19780816 ES 1977-460237 1977 0629 BE 856306 A1 19771230 BE 1977-178943 1977 0630 FR 2356634 A1 19780127 FR 1977-20101 1977 0630 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4430271 A 19840207 US 1976-701729 CA 1104582 A1 19810707 CA 1977-281123 ES 460237 A1 19780816 ES 1977-460237 BE 856306 A1 19771230 BE 1977-178943 FR 2356634 A1 19780127 FR 1977-20101 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441			19780112	DE 1977-2729036	
US 4430271 A 19840207 US 1976-701729 1976 0701 CA 1104582 A1 19810707 CA 1977-281123 1977 0622 ES 460237 A1 19780816 ES 1977-460237 BE 856306 A1 19771230 BE 1977-178943 FR 2356634 A1 19780127 FR 1977-20101 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441					
CA 1104582 A1 19810707 CA 1977-281123 ES 460237 A1 19780816 ES 1977-460237 BE 856306 A1 19771230 BE 1977-178943 FR 2356634 A1 19780127 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441	US 4430271	Α .	19840207		1076
CA 1104582 A1 19810707 CA 1977-281123 1977 0622 ES 460237 A1 19780816 ES 1977-460237 1977 0629 BE 856306 A1 19771230 BE 1977-178943 FR 2356634 A1 19780127 FR 1977-20101 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441	•				
ES 460237 A1 19780816 ES 1977-460237 BE 856306 A1 19771230 BE 1977-178943 FR 2356634 A1 19780127 FR 1977-20101 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441	CA 1104582	A1	19810707		1977
ES 460237 A1 19780816 ES 1977-460237 1977 0629 BE 856306 A1 19771230 BE 1977-178943 1977 0630 FR 2356634 A1 19780127 FR 1977-20101 1977 0630 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441				<	
FR 2356634 B1 19831014 JP 53025285 A1 19771230 BE 1977-178943 FR 277-178943 FR 2356634 B1 19831014 JP 53025285 A2 19780308 A1 1977-78441	ES 460237	A1	19780816	<u> </u>	1977
1977 0630 FR 2356634 A1 19780127 FR 1977-20101 1977 0630 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441	<i>:</i>			<	0629
FR 2356634 A1 19780127 FR 1977-20101 1977 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441	BE 856306	A1	19771230	BE 1977-178943	
1977 0630 FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441					0630
FR 2356634 B1 19831014 JP 53025285 A2 19780308 JP 1977-78441	FR 2356634	A1	19780127	FR 1977-20101	
JP 53025285 A2 19780308 JP 1977-78441				•	0630
1977					
0630					: :
PRIORITY APPLN. INFO.: US 1976-701729 A 1976	PRIORITY APPLN.	INFO.:			
0701				<	

AB Neutralizing sulfonation and sulfation reaction products containing H2SO4 and its monoesters and/or organic sulfonic acids with aqueous NaOH

gave a paste with pH 6-12, which was passed through a countercurrent heat exchanger using water at 15-37.7°. These conditions maintained turbulence of the paste stream and avoided and buildup of Na2SO4 in the heat exchanger.

IT 43168-25-8P

(preparation and purification of)

RN 43168-25-8 HCAPLUS

Ethanol, 2-[2-[2-(hexadecyloxy)ethoxy]-, hydrogen sulfate, CN sodium salt (6CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{15}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

C07C139-00 IC

23-8 (Aliphatic Compounds) CC

Section cross-reference(s): 25

25155-30-0P 43168-25-8P IT

(preparation and purification of)

1

L40 ANSWER 42 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1978:136131 HCAPLUS

DOCUMENT NUMBER:

88:136131

TITLE:

Neutralization of mixtures of organic sulfuric acids or sulfonic acids and excess sulfating

agent, resulting in sodium sulfate Sagel, John A.; Barton, Brandon Harris

INVENTOR(S):

Procter and Gamble Co., USA

PATENT ASSIGNEE(S): SOURCE:

Ger. Offen., 35 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2728973	A1	19780112	DE 1977-2728973	
				1977
				0628
			<	
US 4153625	A	19790508	US 1976-701724	
				1976
				0701
			<	
CA 1089872	A1	19801118	CA 1977-281128	
				1977
				0622
			<- -	
ES 460238	A1	19780816	ES 1977-460238	
				1977
				0629
			<	
BE 856307	- A1	19771230	BE 1977-178944	
				1977

						0630
				<		
FR 2356635	A1	19780127	FR	1977-20102		
						1977
						0630
				<		
FR 2356635	B1	19810710				
JP 53025286	A2	19780308	JP	1977-78442		
						1977
						0630
•				<		
PRIORITY APPLN. INFO.:			US	1976-701724	Α	
						1976
		•		•	,	0701

AB Sulfonation and sulfation products, containing H2SO4 and its monoesters and/or organic sulfonic acids, were neutralized with aqueous NaOH to give a watery paste at pH 6-12; the paste was passed through a countercurrent heat exchanger in which the cooling medium entered at 5-100° and flowed through the heat exchanger so as to maintain turbulence in the paste stream and avoid excessive deposition of Na2SO4 in the exchanger.

IT 43168-25-8P

(preparation and purification of)

43168-25-8 HCAPLUS RN

Ethanol, 2-[2-[2-(hexadecyloxy)ethoxy]ethoxy]-, hydrogen sulfate, CN sodium salt (6CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{15} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

Na

IC C07C139-00

CC 23-8 (Aliphatic Compounds)

Section cross-reference(s): 25

IT 25155-30-0P 43168-25-8P

(preparation and purification of)

L40 ANSWER 43 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1977:541668 HCAPLUS

DOCUMENT NUMBER:

87:141668

TITLE:

Ionic surfactants applicable in the

presence of multivalent cations.

Physicochemical properties

AUTHOR (S): CORPORATE SOURCE: Shinoda, Kozo; Hirai, Tsuyoshi Fac. Eng., Yokohama Natl. Univ., Yokohama,

Japan

SOURCE:

Journal of Physical Chemistry (1977

), 81(19), 1842-5

CODEN: JPCHAX; ISSN: 0022-3654

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Ordinary ionic surfactants are salted out and cannot be used in water in the presence of multivalent cations, because they do not dissolve in hard water more than half their saturation concns. of multivalent salts of surfactants, i.e., neither

micellization nor solubilization occurs. Ca and Mg salts of surface active anions, C12H25OCH2CH2SO4.0.5Ca(Mg) which can dissolve well in water in the presence of bivalent cations at room temperature were prepared and the physicochem. properties of their aqueous solns. were studied. The critical micelle concentration (cmc).

the solubilizing power for cyclohexane, and the surface tension of aqueous solution above the cmc of C12H25OCH2CH2SO4.0.5Ca were resp. 1/9, 4.7 times larger, and 8 dyn/cm lower than those of Na dodecyl sulfate. A liquid surfactant phase was observed above the Krafft point in the presence of a large amount of bivalent cations or a small amount of trivalent cations. This phenomenon manifests the continuous change from micelle (pseudo phase) to liquid surfactant phase (true phase), i.e., from finite to infinite aggregation supporting the pseudo-phase separation model of micellar solution

IT 3088-31-1 13150-00-0 41343-91-3 41343-92-4 54717-42-9 60484-04-0 63596-52-1 63596-53-2 63596-54-3

(Krafft point of)

RN 3088-31-1 HCAPLUS

 $Me^{-(CH_2)}_{11}^{-0} - CH_2^{-CH_2}^{-0} - CH_2^{-CH_2}^{-0} - CH_2^{-0}$

Na

RN 13150-00-0 HCAPLUS

CN Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 41343-91-3 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

●1/2 Ca

RN 41343-92-4 HCAPLUS

 $Me^{-(CH_2)}_{11}-O^{-CH_2}-CH_2-O^{-CH_2}-CH_2-OSO_3H$

●1/2 Ca

RN 54717-42-9 HCAPLUS

CN 3,6,9,12,15,18-Hexaoxatriacontan-1-ol, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

Na

PAGE 1-B

 $-CH_2-CH_2-O-CH_2-CH_2-OSO_3H$

RN 60484-04-0 HCAPLUS

CN Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, magnesium
 salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{11}^{-0} - CH_2^{-CH_2}^{-0} - CH_2^{-CH_2}^{-0} - CH_2^{-0} - CH_2^{-0}$

●1/2 Mg

RN 63596-52-1 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, magnesium salt (9CI) (CA INDEX NAME)

 $Me^- (CH_2)_{11}^- O^- CH_2^- CH_2^- OSO_3H$

●1/2 Mg

RN 63596-53-2 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, potassium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

K

RN 63596-54-3 HCAPLUS
CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, lithium salt (9CI)
(CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

● Li

IT 63596-55-4P

(preparation of)

RN 63596-55-4 HCAPLUS

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

●1/2 Mn(II)

CC 66-2 (Surface Chemistry and Colloids)

Section cross-reference(s): 46

ST ionic surfactant applicable hard water; micellization multivalent cation effect; Krafft point hard water surfactant; dodecyl polyoxyethylenesulfonate surfactant

IT Krafft point

(of dodecyl polyoxyethylene sulfate ionic surfactants

IT Surfactants

(ionic, dodecyl polyoxyethylene sulfates, for hard water)

IT 3088-31-1 13150-00-0 41343-91-3 41343-92-4 54717-42-9 56049-86-6 60484-04-0 63596-52-1 63596-53-2

63596-54-3

(Krafft point of)

IT 63596-55-4P

(preparation of)

L40 ANSWER 44 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1975:74811 HCAPLUS

DOCUMENT NUMBER:

82:74811

TITLE:

Surfactance of sulfated sodium salts

of saturated long chain fatty alcohols and of their monoethers with ethylene glycol and

diethylene glycol

AUTHOR(S): Kailasam, S.; Subrahmanyam, V. V. R.

CORPORATE SOURCE: Dep. Chem. Technol., Univ. Bombay, Bombay,

India

SOURCE: Journal of the Oil Technologists' Association

of India (Mumbai, India) (1974),

6(3), 55-9

CODEN: JOTIAC; ISSN: 0970-4094

DOCUMENT TYPE: Journal LANGUAGE: English

AB Lauryl, myristyl, palmityl, and stearyl alcs. and their monoethers with ethylene and diethylene glycols were sulfated, neutralized with NaOH solution, and added (10%) to soaps, improving the performance of the soaps in hard water. The improvement was less than that reported for surfactants prepared similarly from lauric, myristic, palmitic, and stearic acids and

the two diols.
3088-31-1 3694-74-4 14858-54-9

14858-55-0 14858-61-8 14858-62-9 15826-16-1 26482-91-7

(surface activity of, as soap additive)

RN 3088-31-1 HCAPLUS

TT

CN Ethanol, 2-[2-(dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 3694-74-4 HCAPLUS

CN Ethanol, 2-(tetradecyloxy)-, hydrogen sulfate, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-OSO_3H}$

Na

RN 14858-54-9 HCAPLUS

CN Ethanol, 2-(hexadecyloxy)-, hydrogen sulfate, sodium salt (6CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{15}-O-CH_2-CH_2-OSO_3H}$

Na

RN 14858-55-0 HCAPLUS

CN Ethanol, 2-[2-(hexadecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{15} - O^{-CH_2} - CH_2 - O^{-CH_2} - CH_2 - OSO_3H$

Na

RN 14858-61-8 HCAPLUS

CN Ethanol, 2-(octadecyloxy)-, hydrogen sulfate, sodium salt (6CI,
7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{17}-O-CH_2-CH_2-OSO_3H}$

Na

RN 14858-62-9 HCAPLUS

CN Ethanol, 2-[2-(octadecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (6CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{17}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 15826-16-1 HCAPLUS

CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{11}-O-CH_2-CH_2-OSO_3H}$

Na

RN 26482-91-7 HCAPLUS

 $Me^{-(CH_2)_{13}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

CC 46-3 (Surface Active Agents and Detergents)

IT Surfactants

(sulfates of alcs. and ethoxylated alcs., as lime soap dispersants)

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151-21-3, properties
                            1120-01-0
                                        1120-04-3
                                                    1191-50-0
     3088-31-1 3694-74-4 14858-54-9
     14858-55-0 14858-61-8 14858-62-9
     15826-16-1 26482-91-7
        (surface activity of, as soap additive)
L40 ANSWER 45 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1971:100890 HCAPLUS
DOCUMENT NUMBER:
                         74:100890
                         Sulfated diglycolamides
TITLE:
                         Weil, James K.; Parris, N.; Stirton, Alexander
AUTHOR (S):
CORPORATE SOURCE:
                         East. Reg. Res. Lab., Agric. Res. Serv.,
                         Philadelphia, PA, USA
SOURCE:
                         Journal of the American Oil Chemists' Society
                         (1971), 48(1), 35-7
                         CODEN: JAOCA7; ISSN: 0003-021X
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
    Pure sulfated diglycolamides are prepared by sulfation of products
     from the alkali-catalyzed reaction of diglycolamide with fatty Me
     esters. Products containing 70% Me-substituted diglycolamides were
     obtained by addition of 1 mole of propylene oxide to a mole of
     hydroxyethylamide under alkaline catalysis. Sulfated
     monooxypropylated hydroxyethylstearamide,
     C17H35CONHC2H4OCH2CH(CH3)OSO3Na, and sulfated diglycolstearamide,
     C17H35CONH(C2H4O)2-SO3Na, have good solubility, lime-soap dispersing
     power, and detergency.
     14858-63-0P
ΙT
        (preparation of)
RN
     14858-63-0 HCAPLUS
     2-Propanol, 1-(octadecyloxy)-, hydrogen sulfate, sodium salt (9CI)
CN
       (CA INDEX NAME)
   OSO<sub>3</sub>H
Me-CH-CH_2-O-(CH_2)_{17}-Me
CC
     46 (Surface Active Agents and Detergents)
IT
     14351-59-8P
                  14351-60-1P 14858-63-0P 20138-27-6P
     20138-28-7P
                   20429-33-8P
                                26535-49-9P
                                               32338-76-4P
     32368-60-8P
                  32368-61-9P
                                 32368-62-0P
                                               32368-63-1P
     32368-64-2P
                  32425-87-9P 32466-47-0P
        (preparation of)
```

L40 ANSWER 46 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1971:14392 HCAPLUS

DOCUMENT NUMBER: 74:14392

TITLE: Synthesis and surface active properties of

long-chain ether alcohol sulfates

R (OCH2CHR') iOSO3Na

AUTHOR(S): Weil, James K.; Stirton, Alexander J.;

Wrigley, A. N.

CORPORATE SOURCE: East. Reg. Res. Lab., U. S. Dep. Agric.,

Philadelphia, PA, USA

SOURCE: Chim. Phys. Appl. Prat. Ag. Surface, C. R.

Congr. Int. Deterg., 5th (1969),

Meeting Date 1968, Volume 1, 45-50. Ediciones

Unidas, S. A.: Barcelona, Spain.

CODEN: 22LKAT

DOCUMENT TYPE: Conference LANGUAGE: English

AB Purified ether alc. sulfates were prepared by the sulfation of the separated reaction products of ethylene, propylene and 1,2-butylene oxides with 12, 14, 16 and 18 C normal primary alcs. The effect of structure on critical micelle concentration, Krafft point, surface tension and lime soap dispersing power was investigated. The effect of oxyalkyl groups in reducing critical micelle concentration and increasing Krafft point was expressed in terms of an equivalent number of methylene groups.

IT 14858-57-2P

(preparation of)

RN 14858-57-2 HCAPLUS

CN 2-Propanol, 1-[2-(hexadecyloxy)-1-methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

Na

CC 46 (Surface Active Agents and Detergents) IT 14858-57-2P

(preparation of)

L40 ANSWER 47 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1970:102089 HCAPLUS

DOCUMENT NUMBER: 72:102089

TITLE: Synthesis and properties of sulfated

alkanolamides

AUTHOR(S): Weil, James K.; Parris, N.; Stirton, Alexander

J.

CORPORATE SOURCE: Eastern Reg. Res. Lab., Philadelphia, PA, USA

SOURCE: Journal of the American Oil Chemists' Society

(1970), 47(3), 91-3

CODEN: JAOCA7; ISSN: 0003-021X

DOCUMENT TYPE: Journal LANGUAGE: English

AB High-purity alkanolamides were prepared by the Na-catalyzed reaction of Me stearate, Me palmitate and Me laurate with ethanolamine, 2-hydroxypropylamine, 3-hydroxypropylamine and N-methyl-N-hydroxyethylamine. The effect of structure on the surface active properties of the sulfation products was investigated. Stability studies showed that sulfated N-methyl-N-hydroxyethylstearamide hydrolyzed rapidly by first order kinetics in acid or base. Sulfated hydroxyalkyl primary amides hydrolyzed slower in basic media following second order

kinetics. Me groups attached to the N atom or to C in the short aliphatic chain improved **solubility** but had little effect on critical micelle concentration. The alkanolamides of palmitic and stearic acids were good detergents and lime soap dispersing agents.

14858-63-0

(surface-active) 14858-63-0 HCAPLUS

CN 2-Propanol, 1-(octadecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

OSO₃H | | ... Me- CH- CH₂- O- (CH₂)₁₇- Me

Na

46 (Surface Active Agents and Detergents) CC amide hydroxyalkyl; alkanolamide surfactant STIT 142-86-9 151-21-3, properties 14351-59-8 14858-63-0 26535-44-4 26535-45-5 26535-42-2 26535-46-6 26535-47-7 26535-48-8 26535-49-9 26535-50-2 26574-43-6 26577-87-7 (surface-active)

L40 ANSWER 48 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

CORPORATE SOURCE:

1968:42943 HCAPLUS

DOCUMENT NUMBER:

68:42943

TITLE:

IT

RN

Metabolism of some anionic tallow-based

detergents by sewage microorganisms
Cordon, Theone C.; Maurer, Elmer W.;

AUTHOR(S):

Nunez-Ponzoa, M. V.; Stirton, Alexander J.

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Applied Microbiology (1968), 16(1),

48-52

CODEN: APMBAY; ISSN: 0003-6919

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB A method in which the test detergent was the sole source of carbon was used to study the metabolism of several tallow-based detergents. These were tallow alc. sulfates, long-chain ether alc. sulfates, and esters of α-sulfo fatty acids. Na p-(1-methylundecyl)benzenesulfonate (LAS) was used as a reference material. The alc. sulfates were the most rapidly and completely metabolized (96-9%), and ether alc. sulfate was 94% degraded. The other compds. were metabolized to the extent of 61-87%; LAS was 80% degraded. Except for the alc. sulfates, loss of methylene blue activity (M.B.A.) occurred long before the chemical O demand (C.O.D.) values had reached a min.; with the alcohol sulfates, M.B.A. and C.O.D. decreased simultaneously.

IT 14858-56-1P 14858-61-8P

(preparation of)

RN 14858-56-1 HCAPLUS

CN 2-Propanol, 1-(hexadecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

OSO₃H $Me-CH-CH_2-O-(CH_2)_{15}-Me$

🕨 Na

RN 14858-61-8 HCAPLUS Ethanol, 2-(octadecyloxy)-, hydrogen sulfate, sodium salt (6CI, CN7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{17}-O-CH_2-CH_2-OSO_3H}$

Na

60 (Sewage and Wastes) CC IT 1847-55-8P 3076-28-6P 14858-56-1P 14858-61-8P (preparation of)

L40 ANSWER 49 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1967:473144 HCAPLUS

DOCUMENT NUMBER:

67:73144

TITLE:

Alkyl sulfates

INVENTOR(S):

Blood, Alden E.; Heller, James D.

PATENT ASSIGNEE(S):

Eastman Kodak Co.

SOURCE:

Fr., 9 pp. CODEN: FRXXAK

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR	1462888		19661216	FR	
				<	
DE	1568436			DE	
GB	1091455			GB	
US	3409657		19681105	US 1965-424182	
					1965
					0108
			,	<	
PRIORIT	Y APPLN. INFO.:			US	
					1965
					0108

The title compds. Me2CHCH(OSO3X)CMe2CH2OR (I) are prepared by AB sulfonating the corresponding hydroxy- (II) or alkoxy- (III) compds. Thus, 174 g. ethoxytrimethylpentanol and 250 ml. iso-C5H12 is cooled to 3°, 121 g. SO2Cl2 introduced slowly in a N atmospheric, and swept with N 30 min. to eliminate HCl. The mixture is neutralized with 400 g. 10% aqueous NaOH, then slowly with 50.6 g. 20% aqueous NaOH, and finally 30 g. 20% aqueous Na2CO3. The iso-C5H12 is

separated, the aqueous solution is extracted with petroleum ether and the extract

distilled to give 42% Na 1- or 3-ethoxytrimethylpentyl sulfate. prepared were 38% Na isobutoxytrimethylpentyl sulfate, 22% Na 2-methylpentoxytrimethylpentyl sulfate, 69.2% Na 2-ethylhexyloxytrimethylpentyl sulfate, and Na decyloxytrimethylpentyl sulfate. The intermediate II and III are prepared by reducing the corresponding dioxanes. For example, 200 g. 2,4-diisopropyl-5,5-dimethyl-1,3-dioxane and 20 g. of a pulverized catalyst containing 5% Pd on Al is hydrogenated at 225°/35 megaponds (absolute) 4 hrs. to give 3-isobutoxy-2,2,4-trimethylpentan-1-ol and 1-isobutoxy-2,2,4trimethylpentan-3-ol, b. 226-32°. The pentanols are separated by distillation through a Oldershaw column to give 3-pentanol, b15 106-10°; 1-pentanol, b15 116-20°. The wetting properties of these penetrating agents are tabulated. 17013-81-9P 17013-82-0P 17013-83-1P 17013-84-2P 17013-85-3P 17013-86-4P

IT 17013-87-5P 17013-88-6P 17013-89-7P 17048-99-6P

(preparation of)

RN17013-81-9 HCAPLUS

CN 1-Pentanol, 3-ethoxy-2,2,4-trimethyl-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

RN17013-82-0 HCAPLUS CN

1-Pentanol, 3-isobutoxy-2,2,4-trimethyl-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

17013-83-1 HCAPLUS RN

CN 3-Pentanol, 1-isobutoxy-2,2,4-trimethyl-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

RN 17013-84-2 HCAPLUS

CN 1-Pentanol, 2,2,4-trimethyl-3-[(2-methylpentyl)oxy]-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

RN 17013-85-3 HCAPLUS

CN 3-Pentanol, 2,2,4-trimethyl-1-[(2-methylpentyl)oxy]-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

RN 17013-86-4 HCAPLUS

CN 1-Pentanol, 3-[(2-ethylhexyl)oxy]-2,2,4-trimethyl-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

RN 17013-87-5 HCAPLUS
CN 3-Pentanol 1-(/2-ethy

CN 3-Pentanol, 1-[(2-ethylhexyl)oxy]-2,2,4-trimethyl-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

RN 17013-88-6 HCAPLUS

CN 1-Pentanol, 3-(decyloxy)-2,2,4-trimethyl-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

RN 17013-89-7 HCAPLUS

CN 3-Pentanol, 1-(decyloxy)-2,2,4-trimethyl-, hydrogen sulfate, sodium salt (8CI) (CA INDEX NAME)

Na

```
RN
     17048-99-6 HCAPLUS
     3-Pentanol, 1-ethoxy-2,2,4-trimethyl-, hydrogen sulfate, sodium
CN
     salt (8CI) (CA INDEX NAME)
 HO3SO Me
i-Pr-CH-C-CH2-OEt
        Me
       Na
IC
     C07C; C11D
CC
     23 (Aliphatic Compounds)
IT
     17013-81-9P 17013-82-0P 17013-83-1P
     17013-84-2P 17013-85-3P 17013-86-4P
     17013-87-5P 17013-88-6P 17013-89-7P
     17048-99-6P
        (preparation of)
L40 ANSWER 50 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        1967:57023 HCAPLUS
DOCUMENT NUMBER:
                         66:57023
TITLE:
                        Ether alcohol sulfates. Effect of
                        oxypropylation and oxybutylation on
                         surface-active properties
AUTHOR (S):
                        Weil, James K.; Stirton, Alexander J.;
                        Nunez-Ponzoa, M. V.
                        Eastern Regional Res. Lab., Philadelphia, PA,
CORPORATE SOURCE:
                         Journal of the American Oil Chemists' Society
SOURCE:
                         (1966), 43(11), 603-6
                         CODEN: JAOCA7; ISSN: 0003-021X
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                        English
     The reaction products of 1,2-butylene oxide (I) with
     C12-18 alcs. were compared with those from the propylene oxide
     (II) reaction. A 60% yield of the 1st derivative was obtained for the
     I reaction, compared with a maximum yield of 50% for the II reaction.
     First and 2nd derivs. were fractionally distilled from the reaction
    mixts. and characterized as pure ether alcs. and their acetates.
     Sulfates of the pure ether alcs. had slightly greater soly
     . than those of II, and both reactions were more effective than
     oxyethylation. Dioxyalkylated products had lower Krafft
    points than monooxyalkylated products. A low degree of
    oxyalkylation had only minor effects on the detergency of alc.
     sulfates, but polyoxybutylation caused significant redns. in foam
    height for the C16-18 alc. sulfates. Critical micelle concentration was
    reduced both by an increasing degree of oxyalkylation and mol. weight
```

limesoap dispersing agents. 11 references.
IT 14858-45-8, 2-Propanol, 1-(dodecyloxy)-, hydrogen sulfate
sodium salt 14858-46-9, 2-Propanol, 1-[2-(dodecyloxy)-1methylethoxy]-, hydrogen sulfate sodium salt 14858-47-0,
2-Butanol, 1-(dodecyloxy)-, hydrogen sulfate, sodium salt
14858-48-1, 2-Butanol, 1-[1-[(dodecyloxy)methyl]propoxy]-,

of epoxide. All of the ether alc. sulfates were effective

hydrogen sulfate, sodium salt 14858-50-5, 2-Propanol, 1-(tetradecyloxy)-, hydrogen sulfate sodium salt 14858-51-6, 2-Propanol, 1-[1-methyl-2-(tetradecyloxy)ethoxy]-, hydrogen sulfate sodium salt 14858-52-7, 2-Butanol, 1-(tetradecyloxy)-, hydrogen sulfate, sodium salt 14858-54-9 14858-55-0, Ethanol, 2-[2-(hexadecyloxy)ethoxy]-, hydrogen sulfate sodium salt 14858-56-1 14858-57-2, 2-Propanol, 1-[2-(hexadecyloxy)-1-methylethoxy]-, hydrogen sulfate sodium salt 14858-58-3 14858-59-4 14858-61-8 14858-62-9 14858-63-0, 2-Propanol, 1-(octadecyloxy)-, hydrogen sulfate sodium salt 14858-64-1 14858-65-2 14858-66-3, 2-Butanol, 1-[1-[(octadecyloxy)methyl]propoxy]-, hydrogen sulfate, sodium salt 30862-56-7, 2-Butanol, 1-[1-[(tetradecyloxy)methyl]propoxy]-, hydrogen sulfate, sodium salt (surface-active) RN 14858-45-8 HCAPLUS 2-Propanol, 1-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) CN (CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}$$
 Me-CH-CH₂-O-(CH₂)₁₁-Me

Na

RN 14858-46-9 HCAPLUS
CN 2-Propanol, 1-[2-(dodecyloxy)-1-methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$OSO_3H$$

 $O-CH_2-CH-Me$
 $Me-CH-CH_2-O-(CH_2)_{11}-Me$

Na

Na

RN 14858-48-1 HCAPLUS

$$\begin{array}{c} \text{OSO}_3\text{H} \\ \text{O--CH}_2\text{--CH--Et} \\ \text{Me--(CH}_2)_{11}\text{--O--CH}_2\text{--CH--Et} \end{array}$$

Na

RN 14858-50-5 HCAPLUS

CN 2-Propanol, 1-(tetradecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$^{
m OSO_3H}_{
m |}$$
 Me-CH-CH₂-O-(CH₂)₁₃-Me

Na

RN 14858-51-6 HCAPLUS

CN 2-Propanol, 1-[1-methyl-2-(tetradecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

Na

RN 14858-52-7 HCAPLUS

Na

RN 14858-54-9 HCAPLUS

CN Ethanol, 2-(hexadecyloxy)-, hydrogen sulfate, sodium salt (6CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)}_{15} - O^{-CH_2} - CH_2 - OSO_3H$

Na

RN 14858-55-0 HCAPLUS

CN Ethanol, 2-[2-(hexadecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Me- (CH₂)₁₅-0-CH₂-CH₂-0-CH₂-CH₂-0SO₃H

Na

RN 14858-56-1 HCAPLUS

OSO₃H | Me-CH-CH₂-O-(CH₂)₁₅-Me

Na

RN 14858-57-2 HCAPLUS

CN 2-Propanol, 1-[2-(hexadecyloxy)-1-methylethoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

OSO₃H |O-CH₂-CH-Me |Me-CH-CH₂-O-(CH₂)₁₅-Me

Na

RN 14858-58-3 HCAPLUS

CN 2-Butanol, 1-(hexadecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 $\begin{array}{c} \text{OSO}_{3}\text{H} \\ | \\ \text{Me- (CH}_{2})_{15}\text{--O-CH}_{2}\text{--CH-Et} \end{array}$

Na

RN 14858-59-4 HCAPLUS

CN 2-Butanol, 1-[1-[(hexadecyloxy)methyl]propoxy]-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

 OSO_3H $O-CH_2-CH-Et$ $Me-(CH_2)_{15}-O-CH_2-CH-Et$

Na

RN 14858-61-8 HCAPLUS

CN Ethanol, 2-(octadecyloxy)-, hydrogen sulfate, sodium salt (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^-(CH_2)_{17}-O-CH_2-CH_2-OSO_3H$

Na

RN 14858-62-9 HCAPLUS

CN Ethanol, 2-[2-(octadecyloxy)ethoxy]-, hydrogen sulfate, sodium salt (6CI, 8CI, 9CI) (CA INDEX NAME)

 $Me^{-(CH_2)_{17}-O-CH_2-CH_2-O-CH_2-CH_2-OSO_3H}$

Na

RN 14858-63-0 HCAPLUS

CN 2-Propanol, 1-(octadecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$^{\rm OSO_3H}_{\rm Me^-\,CH^-\,CH_2^-\,O^-\,(CH_2)_{17}^-\,Me}$$

Na

RN 14858-64-1 HCAPLUS
CN 2-Propanol, 1-[1-methyl-2-(octadecyloxy)ethoxy]-, hydrogen
sulfate, sodium salt (9CI) (CA INDEX NAME)

$$OSO_3H$$

 $O-CH_2-CH-Me$
 $Me-CH-CH_2-O-(CH_2)_{17}-Me$

Na

RN 14858-65-2 HCAPLUS CN 2-Butanol, 1-(octadecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OSO}_3\text{H} \\ | \\ \text{Me- (CH}_2)_{17} - \text{O- CH}_2 - \text{CH- Et} \end{array}$$

Na

$$^{
m OSO_3H}$$
 $^{
m O-}$ $^{
m CH_2-}$ $^{
m CH-}$ Et $^{
m Me-}$ $^{
m (CH_2)}$ $^{
m 17-}$ $^{
m O-}$ $^{
m CH_2-}$ $^{
m CH-}$ Et

Na

RN 30862-56-7 HCAPLUS
CN 2-Butanol, 1-[1-[(tetradecyloxy)methyl]propoxy]-, hydrogen
sulfate, sodium salt (9CI) (CA INDEX NAME)

```
 \begin{array}{c} \text{OSO}_3\text{H} \\ \text{O---} \text{CH}_2\text{---} \text{CH---} \text{Et} \\ \text{Me---} \text{(CH}_2)_{13}\text{---} \text{O---} \text{CH}_2\text{---} \text{CH---} \text{Et} \end{array}
```

Na

```
CC
     46 (Surface Active Agents and Detergents)
IT
     Surfactants, properties
        (ether alc. sulfates as)
IT
     Alcohols, compounds
        (reaction products with 1,2-epoxybutane or propylene
        oxide, sulfated, sodium salts, surface-active)
     2-Butanol, 1-[1-[(octadecyloxy)methyl]propoxy]-, acetate
IT
        (preparation of)
IT
     14858-34-5P, 2-Butanol, 1-[1-[(hexadecyloxy)methyl]propoxy]-
     14858-35-6P, 2-Butanol, 1-(octadecyloxy)- 14858-36-7P
14858-37-8P, 2-Butanol, 1-(dodecyloxy)-, acetate 14858-38-9P
     14858-39-0P, 2-Butanol, 1-(tetradecyloxy)-, acetate 14858-40-3P
     14858-41-4P, 2-Butanol, 1-(hexadecyloxy)-, acetate
                                                            14858-42-5P,
     2-Butanol, 1-[1-[(hexadecyloxy)methyl]propoxy]-, acetate
     14858-43-6P, 2-Butanol, 1-(octadecyloxy)-, acetate 14863-64-0P
     14863-65-1P 14863-66-2P, 2-Butanol, 1-[1-
     [(tetradecyloxy)methyl]propoxy] - 14863-67-3P, 2-Butanol,
                        14960-27-1P
     1-(hexadecyloxy)-
        (preparation of)
IT
     75-56-9, Propylene oxide 106-88-7
        (reaction products with fatty alcs., sulfated, sodium
        salts, surface-active)
IT
     14858-45-8, 2-Propanol, 1-(dodecyloxy)-, hydrogen sulfate
     sodium salt 14858-46-9, 2-Propanol, 1-[2-(dodecyloxy)-1-
     methylethoxy]-, hydrogen sulfate sodium salt 14858-47-0,
     2-Butanol, 1-(dodecyloxy)-, hydrogen sulfate, sodium salt
     14858-48-1, 2-Butanol, 1-[1-[(dodecyloxy)methyl]propoxy]-,
     hydrogen sulfate, sodium salt 14858-50-5, 2-Propanol,
     1-(tetradecyloxy)-, hydrogen sulfate sodium salt
     14858-51-6, 2-Propanol, 1-[1-methyl-2-
     (tetradecyloxy)ethoxy]-, hydrogen sulfate sodium salt
     14858-52-7, 2-Butanol, 1-(tetradecyloxy)-, hydrogen
     sulfate, sodium salt 14858-54-9 14858-55-0,
     Ethanol, 2-[2-(hexadecyloxy)ethoxy]-, hydrogen sulfate sodium salt
     14858-56-1 14858-57-2, 2-Propanol,
     1-[2-(hexadecyloxy)-1-methylethoxy]-, hydrogen sulfate sodium salt
     14858-58-3 14858-59-4 14858-61-8
     14858-62-9 14858-63-0, 2-Propanol,
     1-(octadecyloxy)-, hydrogen sulfate sodium salt 14858-64-1
     14858-65-2 14858-66-3, 2-Butanol,
     1-[1-[(octadecyloxy)methyl]propoxy]-, hydrogen sulfate, sodium
     salt 30862-56-7, 2-Butanol, 1-[1-
     [(tetradecyloxy)methyl]propoxy]-, hydrogen sulfate, sodium salt
        (surface-active)
```